

Ally S. R.R.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,

INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

SATURDAY, SEPTEMBER 24, 1859.

Second Quarto Series, Vol. XV., No. 39.---Whole No. 1,223, Vol. XXXII.

Galvanized SHEETING NAILS.
Galvanized RIVETS.
Galvanized SHEET IRON of all widths
and gauges.

ESTABLISHED IN 1831.

Galvanized CUT and WROUGHT NAILS.
Galvanized WIRE.
Galvanized SCREWS.

Galvanized RAILROAD SPIKES.
Galvanized SHIP SPIKES.
Galvanized SEATING NAILS.
Galvanized LIGHTNING RODS.

CORRUGATED SHEET IRON FOR ROOFING.

NEW-YORK: PLUMBERS AND STEAMFITTERS, BRASS WORK.

PUBLISHED WEEKLY BY SHOT, PIPE AND SHEET LEAD.

JOHN H. SCHULTZ & CO.

Front Room, Third Floor,

No. 9 Spruce Street.

MARSHALL LEFFERTS & BROTHER.

ROOFING.

FLOORING OF RAILWAY BRIDGES, ETC.

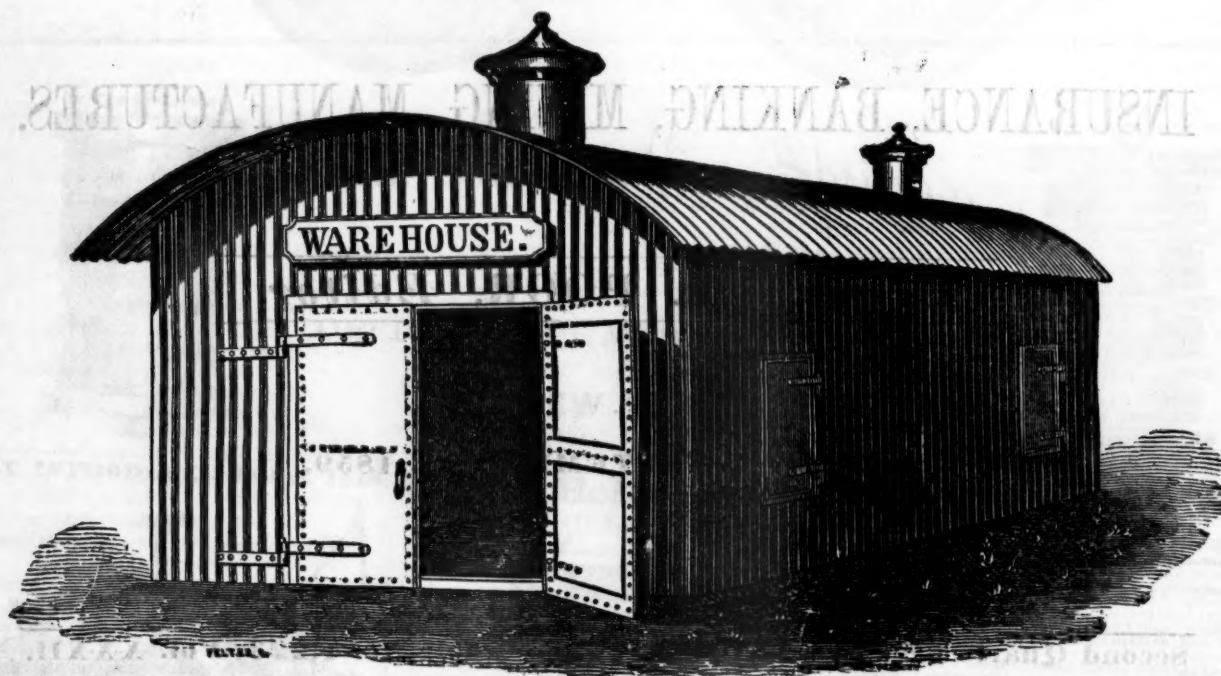
GALVANIZED SHEET IRON,

CORRUGATED OR PLAIN;

ORDINARY SHEET IRON PREPARED IN THE SAME WAY.

Plans and Estimates given for IRON ROOFS to be erected in any part of the UNITED STATES.

Cornices, Gutters, Ridge Caps, Leaders, Spouts, etc.



CORRUGATED IRON BUILDING COMPLETE.

FOR CORRUGATED IRON ROOFS we refer to Buildings in the New York Navy Yard, the New Depot of the New Jersey Railroad and Transportation Company at Jersey City, Capitol Extension at Washington, U. S. Custom Houses, etc., in various parts of the UNITED STATES.

The subscribers have constantly on hand and for sale -

Galvanized RAILROAD SPIKES,
Galvanized SHIP SPIKES,
Galvanized SLATING NAILS,
Galvanized LIGHTNING RODS.

Galvanized HOOP IRON,
Galvanized CUT and WROUGHT NAILS,
Galvanized WIRE,
Galvanized SCREWS,

Galvanized SHEATHING NAILS,
Galvanized RIVETS,
Galvanized SHEET IRON, of all Widths
and Gauges.

**CORRUGATED SHEET IRON FOR ROOFING.
PLUMBERS AND STEAMFITTERS' BRASS WORK.**

SHOT, PIPE AND SHEET LEAD.

**Pig Lead, Pig Iron, Sheet Iron, Tin Plates, Spelter, Banca and Straits
Tin, Ingot Copper, Brazier's Sheets, and other Metals.**

MARSHALL LEFFERTS & BROTHER,

Nos. 90 and 92 Beechman st., NEW YORK.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 39.]

SATURDAY, SEPTEMBER 24, 1859.

[WHOLE No. 1,223, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

PRINCIPAL CONTENTS.

American vs. English Locomotives	609
Pennsylvania Railroad—Tonnage Tax	616, 611
New York and Erie Railroad	617, 611
Journal of Railroad Law	612
English vs. American Rails	612
New Orleans and Jackson Railroad	612
New York Central Railroad	613
Satisfactory Condition of the U. S. Treasury	614
Trade and Commerce of Cincinnati	614
Cost of Transp. Coal on the B. & O. R. R.	615
Railroad Earnings	615
Sale of Pacific Railroad Lands	616
Albany Northern Railroad	616
St. Louis and Memphis Railroad	616
North Missouri Railroad	617
Sunday Street Railroad Travel	618
Alabama and Florida Railroad	617, 618
Export Trade of New Orleans	618

American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, September 24, 1859.

American (Rogers') against English Locomotive Engines.

For several years past railroads have been making active progress in *Chile*, under the superintendence, mainly, of American Engineers. Their position and influence have, however, been strongly opposed by English Engineers, who, backed by the prestige of that country abroad, succeeded in placing on the Southern Railroad of Chile, English locomotives, as the only machines worth having. The Railroad Company, however, were induced to order two American engines from the well-known Rogers' Locomotive Works, (formerly Rogers, Ketchum & Grosvenor,) of Paterson, with a view of testing the degree of the great assumed superiority of the English engine. Under direction of the company, a trial of their respective merits was ordered, which resulted in the complete triumph of the American engines. Previous to the trial, the following statement of the weight of engines, dimension of parts, and the consequent result which ought to follow, was prepared for the company by the English Engineer of the road:

Report of the English Engineer of the Valparaiso and Santiago Railway, on the relative powers of the American and English Engines, on the Southern Railway of Chile, made prior to the experimental trial of their powers.

VALPARAISO, July 8th, 1859.

In comparing the relative powers of locomotive engines, we must first ascertain the tractive power of steam in the cylinders of each upon a level line; that it is to say, the power due to the relative proportion of the cylinders, length of the stroke, the effective pressure of steam, and the circumference of the driving wheels.

The effective pressure of steam being the pressure over that actually requisite to move the engine from a state of rest, and as the data forwarded from Santiago does not give the latter, I will suppose 10 lbs. of steam in the boiler will enable the engine to move itself.

By Tredgold's formula $x = \frac{2aP2S}{d}$

When a is the area of piston in inches,
 P " " effective pressure in lbs.,
 S " " length of stroke,
 d " " circumference of driving wheels,

or by the table of co-efficients in the case of example: No. 1, when a will equal 153,938 sq. inch.

P " " say 70 lbs.
 S " " 24 in. } co-eff.
 d " " 207,345 } .2315

Thus $x = 153,938 \times 2 \times 70 \times .2315 = 4,989$ lbs., which is the tractive power due to the steam in the cylinders of the American passenger engine "Santiago." I will now follow the same rule with example No. 3, which is the English passenger engine "Montt" in which case:

$a = 176,715$ sq. inches,
 $P = 70$ lbs.
 $S =$ } co-efficient .2264,
 $d =$

Then $x = 176,715 \times 2 \times 70 \times .2264 = 5,589$ lbs.

Thus the tractive power of the engine "Montt" exceeds the tractive power of the "Santiago" 612 lbs. or, if the power of the "Santiago" equal 1.00 the " " " "Montt" will " 1.123

I will now proceed to apply the same calculations to the two goods engines, the "San Bernardo" and "Varas," in the first of which cases:

$a = 201,062$,
 $P = 70$,
 $S =$ } co-efficient = .2680,
 $d =$

Then $x = 201,062 \times 2 \times 70 \times .2680 = 7,548$ lbs., and in the case of the English goods engine "Varas" we shall have:

$a = 213,825$,
 $P = 70$,
 $S =$ } co-efficients = .2829,
 $d =$

Then $x = 213,825 \times 2 \times 70 \times .2829 = 8,469$ lbs.

Thus assuming Tredgold's formula to give a correct idea of the relative powers of engines we find that

Tractive Pro-
power. portion
strength.

The American passenger engine "Santiago" No. 1	4,989	1.00
The English pass. engine "Montt" No. 3	5,589	1.12
The American goods engine "San Bernardo" No. 7	7,548	1.511
The English goods engine "Varas" No. 8	8,469	1.697

But as the tractive power of the cylinders and the actual power of the engine may differ according to the full or insufficient weight upon the driving wheels, let us see how the various engines compare in this respect. We have given to us the weight of each engine on the driving wheels and as the adhesion of a locomotive is under the most favorable circumstances about 1-6th the actual insistent weight, we can find the actual adhesion in lbs. by dividing the total weight on the driving wheels by this proportion.

Thus, the adhesion being taken as equal in each case, we find that the tractive adhesion in the several examples will be:

Tractive Pro-
adhesion. portion.

The American passenger engine "Santiago," No. 1	6,626 lbs.	1.00
The English passenger engine "Montt," No. 3	7,687 "	1.16
The Amer. goods engine "San Bernardo," No. 7	6,527 "	0.985
The Engl. goods eng. "Varas," No. 8	10,680 "	1.61

From this result it is apparent that the tractive adhesion of the American engine "San Bernardo" to the rails is less than that of the American passenger engine "Santiago," while the power of both the two English engines is greatly superior to either.

Now the boiler is the source of power in the locomotive; let us see how these four engines compare in this respect.

Square Pro-
feet. portion.

The fire-surface of No. 1 is given at 788	1.00
3 " " " 1,204	1.537
7 " " " 902	1.152
8 " " " 1,188	1.517

Thus we observe that in addition to the superiority of tractive power of cylinders and the tractive adhesion to the rails possessed by the English engines, their ability to sustain that power by the generation of a sufficiency of steam exceeds by about 50 per cent. that of the American engines.

In this we find one of the reasons of the well known economy of consumption of fuel by the former; the heat applied being more completely absorbed by the water in the boiler.

Clark in his large work on Locomotive Engines says: "Practically there can never be too much heating surface as regards economical consumption, but there may be too little."

But there is perhaps another reason for the economy referred to, viz:—in the relative proportions of grate and heating surface in the American engines. I am of opinion that this has not been well considered, the "Santiago" being the worst of the two in this respect.

Having demonstrated the superiority of the English over the American engines by the application of the usual formula, I will now seek to know and show what extent of additional power they will possess in the operations upon the line.

Let us suppose the line straight and level in the first instance, that the air is calm, and that the frontage of train is equal to 60 sq. feet.

We will assume the friction as 6 lbs. per ton, and the resistance due to concussions (varying as

the speed of the train which we will take as 20 miles per hour) to be 7 lbs. per ton, and the resistance of the atmosphere at 1 lb. per square ft. of train or 60 lbs. We must now assume that the train weighs 100 tons. Thus for a train of this weight we shall have:

Resistance due to friction	600 lbs.
Do. concussions	700 "
Do. atmosphere	60 "
	1,360 lbs.

and $\frac{1,360}{100} = 13.6$ lbs. average resistance per ton of train.

Having found the tractive power of the engines and the resistance per ton of train, it is easy to ascertain how many tons each engine will draw under the above circumstances.

	Proportion of strength.	Grade.	Will draw ab't on Level Line.	Proportion of power.
American Pass. Engine	1.00	188	366 Tons.	1.00
English " "	1.28	177	411 "	1.12
American Goods Engine	1.45	200	554 "	1.51
English " "	2.31	319	628 "	1.70

The following is a summary of the dimensions and comparative calculated powers of Locomotive Engines on the Southern Railway of Chile.

GOODS ENGINES.

"Varas" "San Bernardo"

English American

by by

R. & W. the Rogers

Hawthorne, L. & M.

Works.

28.60	28.11	.... Total weight in tons of 2240 lbs.	27.61	27.78
64,081	39,160	.... Weight on driving wheels in English lbs.	46,122	39,576
6	4	.... Number of driving wheels	4	4
4 1/2	4 3/4	.... Diameter of driving wheels in feet	5 1/2	5 1/2
16 1/2 x 24	16 x 24	.... Dimensions of cylinders in inches	15 x 22	14 x 24
168	162	.... Number of tubes	170	140
1 3/4	1 3/4	.... Inside diameter of tubes in inches	1 3/4	1 3/4
14 1/4	11 1/2	.... Length of tubes in feet	14 1/2	11
97	76	.... Fire-box surface in square feet	81	77
1,091	826	.... Tube surface	1,123	706
1,188	912	.... Total Fire	1,204	783
17	14	.... Area of Grate	15	14
4,436.64	3,952.17	.... Cubic feet of steam used in a mile	2,927.16	2,613.23

DECIMAL COMPARISON.

1.64	1.00	.... In reference to weight on driving wheels.	1.16	1.00
1.27	1.00	.... " " Fire-box surface	1.05	1.00
1.82	1.00	.... " " Tube	1.59	1.00
1.80	1.00	.... " " Total Fire	1.54	1.00
1.21	1.00	.... " " Grate Area	1.07	1.00
1.12	1.00	.... " " Traction of power at equal pressure	1.12	1.00

SANTIAGO, July 1st, 1859.

It will be seen by the above statement that the English engines should have exerted on effect more than 11 per cent. greater than the American. Now for the result as shown by Notes taken at the trial.

NOTES IN REFERENCE TO TRIAL TRIPS ON THE SOUTHERN RAILWAY OF CHILE.

The 1st day, July 19th, 1859.—The "San Bernardo," American Goods Engine, by The Rogers' Locomotive and Machine Works, of Paterson, New Jersey, took her train of 35 eight-wheeled cars, gross tonnage 587, from Santiago to the summit, 11 1/2 miles, in 41 minutes, making one experimental stop of 1 1/2 minutes on the way, to see if she had adhesion sufficient to start her train on a gradient of 13 feet per mile, which she did without slipping, one brake being on by carelessness. At 13 1/4 miles stopped and switched off 10 cars, took water, and carried 25 cars to the Maipu river. Returning, carried back to Santiago 20 loaded cars, total, 369 gross tons—ran to the summit from the bridge, 6 miles, in 20 1/2 minutes—made steam very free—had to keep the fire-door open most of the time to keep the steam down to the limit, 115 pounds.

The 2d day, July 20th.—The "Varas," English

Goods Engine, by R. & W. Hawthorne, of New Castle, started the same train of 35 cars, load 587 tons of the day before, on a descending gradient of 20 feet per mile for one mile, thence one mile nearly level, thence one mile ascending a gradient of 31 1/2 feet per mile—she ran this distance of 3 miles in 10 minutes, and then stopped for want of steam.

The train was then backed to the 1 1/2 mile post, and again started with 130 pounds of steam; this time she reached the 2 1/2 mile point, and again stopped, not being able to supply herself with steam. The train was then backed to the station, when a 3d trial was made; with 20 loaded cars, gross tonnage, including engine and tender, 370, she ran to the 4 1/2 mile point in 14 1/2 minutes, and stopped for want of steam; stopped 20 minutes, then started with 115 pounds of steam, and ran to the 9 1/2 mile point in 30 minutes, and again stopped for want of steam; remained there 16 minutes, and again started with 95 pounds of steam, and ran to the 11th mile in 7 minutes, making the 11 miles in 88 minutes!!!

She then stopped, and returned with the train to Santiago.

The 3d day, July 21st.—The English Passenger

Engine "Montt," by R. & W. Hawthorne, of New Castle, started from the Santiago station, taking a train of 15 loaded eight-wheeled cars—gross tonnage of train, 298—running to the summit, 11 1/2 miles, in 37' 50" minutes, including one stop of 3' 15" minutes to experiment on starting, which she did without difficulty. Total time to the 17th mile, the end of the route, 49 minutes; returning she carried back the same train to the summit, 6 miles from the Maipu river, in 25' 04" minutes, and returned with her train down grade to Santiago.

The 4th day, July 22d.—The American Passenger Engine "Santiago," by the Rogers Locomotive and Machine Works, of Paterson, started from the Santiago station, taking a train of 15 loaded eight-wheeled cars, gross tonnage of train, 290—running to the summit, 11 1/2 miles, in 28' 06" minutes, including one stop of 1 minute to experiment on starting, which she did without difficulty. Total time to the 17th mile, the end of the route, 34' 30" minutes.

Returning, she carried back the same train to the summit, 6 miles from the Maipu bridge, in 22' 31" minutes, and returned with her train down grade to Santiago.

This closed the trial which resulted in the superiority of the Rogers Locomotives, of both classes, going and coming, although the calculated power of the Hawthorne engines was, in each class, 12 per cent. the greatest as to tractive power; and more as to fire surface and adhesion.

The result of the trial created the liveliest satisfaction on the part of the American Engineers and residents in Chile, as it completely vindicated their national reputation in the matter of mechanical skill, upon which physical superiority, at least, depends; and at once placed them in favor with a people with whom the locomotive engine is too new a wonder not to have its performances viewed with admiration, and who accept superior merit in such an affair, as a test of national superiority. The manufacturers, though some 10,000 miles away, whose skill supplied the means for the triumph, came in for a large share of the gratification felt and expressed.

From the data given, we are unable to point out the precise cause of the superiority of the American engine. Whatever it may have been, it must be referred to superior mechanical skill, either in the better adjustment of the parts, in their more perfect finish, or in the use of those contrivances which utilize the power generated in the highest degree. For the English Engineer to point out the cause of the unsatisfactory results attending his engines at the trial, would be simply a confession of mechanical inferiority.

A triumph like the one recorded, is of national value. The reputation of the Rogers' Works at home has been firmly established, by the uniform excellence of the engines constructed by it, from the first one turned out to the present time. To create a reputation for its engines in other countries, is to elevate in the eyes of the world our mechanical skill as a people, and to open outlets for the products of our industry, in which others can share as well as those who, by the excellence of their work, first opened the markets to us.

Railroad to Boonton.

It is to be presumed the people of Paterson do not want the Boonton Railroad to connect with this place. The Boonton people subscribed thirty thousand dollars toward the project; but whilst the books have been open two days at Congress Hall, not a Paterson man has been there to subscribe. Newark will probably secure the Boonton Railroad.—Paterson Guardian.

Pennsylvania Railroad—Tonnage Tax.

This interesting case, the *Commonwealth of Pennsylvania vs. The Pennsylvania Railroad Company*, in which was involved the construction of the provision of the Federal Constitution, which declares that "No State shall, without the consent of Congress, lay any duty on tonnage," was recently tried and determined in the Dauphin County Court.

The suit came up on an appeal by the company from a settlement made by the Auditor-General and State Treasurer with the company, by which they were found indebted to the State in the sum of \$87,000, for a period of five months up to the first of November last, for tonnage due the State passing over the road from Philadelphia to Harrisburg. The railroad company contended that they are not liable to pay tax on goods coming from States and passing this State, and also that the law imposing this tax is unconstitutional. The company presented a mass of testimony showing their connexions with different railroads, steamboat lines, &c. The Commonwealth, on the other hand, contended that the Pennsylvania Railroad was only a local road, and possessed no chartered privileges outside of the State, and that the company had no right to act warehousemen to receive goods and forward them—that their legitimate business consisted only in shipping goods over their road when brought to them; &c.

The opinion of Judge Pearson, before whom the case was heard, as well as the final verdict were, of course, adverse to the assumption of the company. The *Harrisburg Telegraph* of the 1st inst., gives the following as a summary of the Judge's remarks on the merits of the case:

The arguments being closed last evening, His Honor Judge Pearson delivered a lengthy, elaborate, and able opinion of the case, reviewing the points as they had been presented to the Court. His Honor remarked that the case presented new and important features; a large amount of money was involved in it—perhaps, millions of dollars—together with important questions involving the rights of States. The question presented had no precedent in decisions given in this State, or by the Supreme Court of the United States. He was, therefore, bound to declare the law as he found it, regardless of all consequences, and that the Judiciary ought not, and would not, be influenced by the feeling of the State on any subject. He had no doubt that it was the duty of any Court of this State to declare a law unconstitutional, if it should be found in conflict with the Constitution of the United States. The Judge remarked that the Pennsylvania Railroad Company was incorporated on the 13th of April, 1846, for the purpose of building a railroad from Harrisburg to Pittsburg, and a burden was at that time imposed upon them that they should pay a tonnage tax upon goods carried over their road, and that after the expiration of twelve years they come now to contest the claim upon them made by the State, and the Court is called to decide the constitutional powers of this State. The constitutional power of this State to impose a tax upon goods carried in the State is not doubted; but the right to trammel foreign commerce is disputed. If the duties were merely imposed upon foreign goods passing through this State, it might present another question; but the burden was thrown upon the corporation alone, and not upon citizens of other States. The citizens of this State, as well as those of others, were equally taxed; and it would not do at this time for the railroad company to come into Court and say, "We have collected the money from those who shipped goods over our road, but we won't pay it over because we deem the law imposing those duties unconstitutional." His Honor then inquired, "Who can take advantage of the unconstitu-

tionality of the law?" "Certainly the railroad company cannot; but the party paying the duties might test its constitutionality." He held the law to be a contract between the railroad and the State to pay certain amounts for the franchises received from the commonwealth, and bootied at the idea of the railroad company coming into Court and contesting this claim. They had no defence at all on this plea; they could not come and say, in good conscience, that they had collected this money, but refused to pay it over because they considered the law unconstitutional. The only party that might bring such a plea must be a citizen of another State. He did not look upon them as the agents for the State to collect this tax, but they collected it for themselves. The agent cannot say to the principal that he had collected this money, but refused to pay it over. After explaining the case fully, His Honor directed the jury to return a verdict in favor of the State for the full amount claimed, with interest from the date of the settlement; whereupon the jury retired, and in a short time returned a verdict against the railroad company for the sum of \$91,196 61, debt and interest to date.

It is the intention of the company to carry their case into the higher courts, and there contest the State's constitutional ability, or disability, to levy tonnage duties on the transit of merchandise over their road.

New York and Erie Railroad.

We republish, with some alterations the proposition of Messrs. Heseltine & Powell of London, in reference to the affairs of the Erie railroad. The suggestions made, with those coming from other quarters, will help to form the conclusions finally to be adopted for restoring the finances and position of this company.

We presume little will be done previous to the election of the new board, which is to take place on the 11th proximo. The intervening time will be well occupied in discussing the merits of the various plans laid before the public.

We believe there is a growing confidence that matters can be made right again, so far, at least, as the bondholders are concerned. The road is doing well, and is in a pretty fair condition. Its capacity to earn a very large sum is thoroughly established. What is now wanted is some plan for re-organization that shall command public confidence. This will come by and by. We learn that the Persia brought out Mr. WM. L. SPLETT and Mr. WM. EVANS of London, who are somewhat interested in the road, and very likely largely represent the views of English bondholders. These gentlemen are looking into the affairs of the company, and their opinions or recommendations may have much influence in reference to the plan finally to be adopted.

PREMISES AND ARGUMENTS.

The revenue is so abundant for the 1st, 2d and 3d mortgage bondholders, that many of them may be expected to insist on their rights—and, if not paid early, to mar the whole plan of a friendly foreclosure under 4th and 5th, by pressing a hostile foreclosure under 1st, 2d, or 3d, with a view of enforcing *par* on each.

Therefore, means ought to be found to pay them early all arrears.

The "floating" creditors might force a sacrifice of 4th mortgage bonds, to the serious prejudice of the other 4th and of all subordinate bondholders, or they might procure embarrassing judgments.

Therefore, they ought to be got rid of, and the bonds redeemed.

Without some money being raised, there appears no little peril that before the surplus revenue over and above accruing interest shall have accumulated enough to pay off all arrears and floating debts; some one or more early bondholders or creditors will have grown impatient and hostile, and mar all the friendly plans of re-organization.

Assuming money to be necessary, the terms of re-organization must be such as to raise it by compulsion, i. e., raise it from certain classes as a condition of being admitted, otherwise the "willing horses" are overburdened to save drones.

It is very desirable to avoid even the appearance of using the sponge on any part of the debt, seeing how large an European interest has to be consulted, and how advantageous it will be to avoid even the semblance of dishonor or repudiation.

Therefore do not let objections be raised to the mere appearance of a large common capital stock. It can make no difference *intrinsically* whether a bondholder convert his \$1,000 into \$1,000 stock, part of a total of \$10,000,000, or into \$500, part of a total of \$5,000,000, but it may make a considerable difference in the feelings with which an irritated and aggrieved bondholder would discuss the proposal.

To induce the advance of money by the subordinate interests invited to re-organize, you must remove all serious risk of damage from excessive mortgage charges. It cannot be considered that this point is attained to the extent that will satisfy English notions, if more than \$13,000,000 of mortgage debt remain.

Therefore, the 4th and 5th mortgage bonds ought to be converted into something less perilous, but yet retaining the same order of priority. Let them both be converted into one preference stock, the 5th paying a contribution to the cash fund, for the privilege of ranking along with the 4th, and the 4th being let off from all new contributions of cash. So, then, the 4th will retain the same relative order or priority as if they should foreclose entirely on their own account; but they will not have the monopoly of the surplus after the first three mortgages; and, on the other hand, they will, as a compensation, be relieved from providing the cash, which they must find if they foreclose on their own account.

The unsecured bondholders should turn their claims, both principal and arrears, into a new capital stock at *par*, and the shareholders should turn their shares into the same stock, but valuing them at a discount of 70 per cent.

The contributions to the cash fund to become preferred stock. Assuming that \$1,000,000 is wanted to pay off arrears of interest and the floating debt, a contribution of about 10 per cent. on the 5th mortgage bonds, and on the suggested capital stock of, say, \$10,000,000 (see below) would be ample.

The preferred stock dividends to be accumulative, in case of any temporary omission of dividend, and a clause to be inserted in the new charter prohibiting the company from borrowing any money on bonds or preference shares, in excess of \$13,000,000, and \$6,000,000 thus assimilating the proportions of bond, preference and share capital to that of English railways. Should there be any difficulty in obtaining the insertion of such a

clause, it is proposed to cover the preference capital by a 4th mortgage at a long date, with a sinking fund of 1 per cent. This new mortgage would be necessary, as foreclosing on the present 4th mortgage deed would annul it.

RESULTS.

		Annual Interest at 7 per ct.
Mortgages	\$13,000,000	\$910,000
<i>Preferred stock.</i>		
To be secured by a 4th mortgage if necessary.		
From 4th mort.	\$3,600,000	
From 5th do.	1,000,000	
From 10 per cent. subscription by unsecured bondholders & shareholders on \$10,000 new share capital	1,000,000	
From 10 per cent. subscription by 5th mort. bondholders	100,000	
	5,700,000	399,000
<i>Common stock.</i>		
Unsecured bonds and arrears	\$8,000,000	
* 80 per cent. on \$11,000,000 present Erie Share capital	3,800,000	
	\$11,800,000	
Recusants	1,800,000	
	10,000,000	700,000
Total capital	\$28,700,000	\$2,009,000
Being 40 per cent. net receipts on a gross take of	\$5,022,500	
The average for 5 years ending Sept. 30, 1858	\$5,618,432	

Journal of Railroad Law.

BODILY INJURIES AND SUFFERING.—WHAT DAMAGES ARE RECOVERABLE FOR THEM.

When a passenger is injured by a railroad accident or other disaster, it often happens that the injury, and even the pain and suffering which accompany it, are not confined to the time immediately following the calamity, but they extend on through a long series of years and even through the whole lifetime of the sufferer. So also a personal injury is frequently followed by evils which were not fully apprehended at the outset, but break out only after lapse of time. And it is often a delicate and difficult question to determine how far these future or prospective injuries, are a proper subject of compensation in damages.

The general rule of law on this subject is that while the party through whose negligence the accident happened, is, by no means, to be charged with damages for every item of injury or pain which may, possibly, or even probably, ensue in consequence of it; so, on the other hand, his liability is not to be limited absolutely to those injuries which have already happened at the time when the question is brought to a determination. The law draws the line midway between the two extremes. The defendant must pay damages for all future injuries which, it is shown to a reasonable certainty, will result from the accident, but there his liability ends.

The principles above stated are applied in the

* Each Erie share of \$100 will, on subscribing \$3, receive \$30 in the new capital stock.

late case of *Curtis vs. the Rochester and Syracuse Railroad Company*.

The plaintiff in this action was a female who took passage in the defendants' cars at Geneva with the intention of going to Auburn.

All went well, until the train reached Waterloo. There a switch was deranged, or as the defendants attempted to show on the trial, the rails spread apart, and the train ran from the track.

The plaintiff's ankle was wrenched and her leg bruised. Her injuries did not stop here. A running sore, or ulcer, succeeded upon the bruised place, which continued running down to the time of the trial, nearly two years after the accident.

There was considerable medical testimony admitted in respect to the probability of the sores being healed at some future time and as to the continued effect of the plaintiff's injuries in causing bodily pain and affecting her general health.

Upon the trial, the Judge, in instructing the jury, in reference to the data upon which they were to estimate damages, told the jury that they were to take into consideration "the bodily pain and suffering which the plaintiff suffered or was likely to suffer, in consequence of the neglect of the defendants."

The defendants excepted to this part of the charge and the point was argued upon the appeal.

Judge SELDEN said, on this point, in delivering the opinion of the Court:

"The jury are told that in estimating the damages, they would be justified in taking into consideration 'the bodily pain and suffering which the plaintiff suffered, or was likely to suffer, in consequence of the neglect of the defendants.' This construction, in so far as it relates to future pain and suffering, is clearly erroneous; and if it had not been subsequently modified, the error would, I think, have been necessarily fatal to the judgment. *There is no doubt that bodily pain and suffering is a proper item of damages in such cases.* (Ransom vs. N. Y. & Erie R. R. Co., 15 N. Y., 415.)

"Nor is the estimate necessarily limited to suffering which is past, where the proof renders it reasonably certain that further pain and suffering is inevitable.

"In estimating the pecuniary loss, in such cases, all the consequences of the injury, future as well as past are to be taken into consideration; and there seems to be no reason why a different rule should prevail in respect to bodily pain and suffering. But the objection to the charge is, that it authorizes an allowance of damages for future pain which is rendered probable merely. Damages are to be proved; and none can be allowed except such as are shown by the proof to be, at least, to a reasonable degree, certain.

"The error, however, was corrected upon the trial. The judge, upon his attention being called to the point, further instructed the jury, "that future damages could only be awarded where it is rendered reasonably certain, from the evidence, that such damages will inevitably and necessarily result from the original injury." With this qualification, I see no objection to the charge on this subject, and this objection also should, therefore, be overruled.

"Judge Grover upon the same point said: 'The exception to that portion of the charge holding that the plaintiff could recover a compensation for

bodily pain suffered, or that she was likely to suffer,' is general; and it is settled that such an exception is unavailing, when any portion of the charge thus excepted to is correct.

"In the case of *Ransom vs. New York and Erie Railroad Company*, it was decided by this Court, that bodily pain and suffering arising from an injury, was a proper subject for pecuniary compensation. This exception does not render it necessary to examine that portion of the charge holding that the plaintiff could recover for pain and suffering likely to be suffered.

"In this case, the judge, I think, laid down the true rule, in substance, in his charge; that the plaintiff could only recover damages for such pain and suffering as the evidence rendered reasonably certain would necessarily result from the injury. But, as remarked above, the exception is too general to present any question as to future pain.

"The judgment should be affirmed."

English vs. American Rails.

To the Editor of the AM. RAILROAD JOURNAL:

Your correspondent "J. R." represents me to have "affirmed the decided superiority of English to American rails," which I did not intend to do; for whatever one's opinion may be, it has but little weight when facts can be obtained; and if such a statement can be found in my article, I beg to withdraw it. The undue notoriety given to the letter of the Superintendent of the C. G. R. R., and the attempt at the conclusion that American rails are better than English, because one trial favored the American, was the cause of my offer to make certain tests, the result of which, if accepted; would surely not settle the question, but only be one additional fact towards a settlement.

It is very certain that a large amount of not very productive bonds have been passed off to the English iron masters, and if they occasionally send in return some "rails that splinter," are they not excusable?

But few will claim for the American rails the uniformity of quality it is acknowledged that the English possess; and although the cost of each is at present nearly the same, the latter, I apprehend, will never be excluded, because of inferior quality, but only by legislation or a reduction of wages in this country, neither of which disasters is likely to occur.

Yours, very respectfully,

R. O.

New Orleans and Jackson Railroad.

The following was the business of the New Orleans, Jackson and Great Northern Railroad for the year ending August 31:

Sept., 1858	\$46,029	March, 1859	\$78,241
October	84,861	April	70,839
November	100,575	May	64,561
December	112,121	June	45,431
January, 1859	98,970	July	50,244
February	78,708	August	50,666

Total earnings for twelve months .. \$871,246

The quantity of cotton brought over the road for the year ending 31st August was 144,452 bales.

Genesee Valley Railroad.

We learn from the *Rochester Union* that the portion of this road extending from Avon to Mt. Morris, has been leased for a term of years to the Buffalo, New York and Erie Railroad Company, who already have control of the northern section of the road, from Rochester to Avon.

Satisfactory Condition of the U. S. Treasury.

A correspondent of the *N. Y. Times*, in a letter dated Washington, September 14, 1859, says:—

According to official data the importations for the present fiscal year will greatly exceed those of the year 1857, and will reach in amount at least \$390,000,000, which, at the average duty of 16 per cent. will yield revenue of \$62,400,000, or \$6,400,000 more than was estimated for by Secretary Cobb in his last annual report to Congress. It is an interesting fact that while the Government receipts thus exceed the Secretary's estimates, the public expenditures are falling considerably below his figures. The result of this double operation will be the receipt of a sufficient revenue not only to meet the current wants of the Government without any further loan or re-issue of Treasury notes, but the speedy accumulation of a surplus to be again applied to the redemption of the public debt. Never before, since the foundation of our Government, have the recuperative powers of the Federal exchequer been so forcibly exhibited.

Those who feel an interest in the financial condition of the General Government can rely upon the following statement being authentic, and the data from which it is drawn official and reliable. The balance of unexpended appropriations in the Treasury on the 30th of June, 1858, was four millions below the balance the year previous, and amounted to \$26,782,062 62. This balance on the 30th June, 1859, amounted to \$22,455,991 74

Special appropriations for year ending June 30, 1860.....	41,867,699 63
Permanent appropriations for year ending June 30, 1860.....	8,497,724 50
Estimated additional appropriations for present year	9,000,000 00

Total	\$81,321,415 87
Reducing the estimated balance of appropriations unexpended again, four millions below the preceding year, we have	18,000,000 00

Leaves estimated expenditures for 1859-60	\$63,321,415 87
To meet these expenditures the government had a balance in the treasury July 1st, 1859	\$4,339,275 54
Balance of loan, 1858.....	1,380,000 00
Treasury notes re-issuable June 30, 1859	4,953,200 00

Total available means July 1, 1859, \$10,672,475 54	
Present estimated receipts from customs	62,400,000 00
Present estimated receipts from lands	2,500,000 00
Present estimated receipts from miscellaneous	1,500,000 00

Estimated means for the year 1859-1860	\$77,072,475 54
Deduct estimated expenditures ...	63,321,415 87

Estimated surplus for the year ... \$13,751,059 67

After deducting from this surplus the six millions required to be retained in the Treasury for mint purposes, there still remains a balance of \$7,751,059 67 to be applied to the redemption of outstanding Treasury notes, a sum much larger than the whole amount of notes re-issuable on the 30th June last, and it is a fact well ascertained that no notes redeemed subsequent to that date will be re-issued at the Treasury.

If my figures and estimates, drawn from official sources, be correct, it must be apparent to every one that the Treasury will be under no necessity to draw again upon its credit; and that there will not only be no call for another Government loan, but no other re-issue of Treasury notes except a small amount, say two millions of those on hand 30th June last, and then re-issuable, as included above in the "available means July 1, 1859."

How then will the surplus this year of nearly fourteen millions of dollars—with the prospect of

a large increase in the future—be absorbed? With the exception of \$40,000, the public debt is bearing an interest of 5, 5½, 5¾ and 6 per cent.—and the holders will regard it as a first-class permanent investment, and be reluctant to surrender the stock to the Government even after the Treasury is in funds to reimburse it.

What a change a single twelvemonth presents in the condition of our national finances. Then every effort was directed to the raising of revenue—now the Treasury Department is already planning for a redemption of the public debt in advance of its maturity. Well may our government stock be eagerly sought after by capitalists at home and abroad, for with us a pecuniary embarrassment must always be temporary.

Trade and Commerce of Cincinnati.

A supplement to the "*Cincinnati Price Current*," published on the 14th inst., gives a statement of the Trade and Commerce of that city for the year ending 31st August, 1859. It occupies nineteen columns of the sheet, and exhibits the progress of the city since its foundation in 1788.

At first called Losantiville, but subsequently Cincinnati, it was many years after the date of its foundation that the city began to rise into eminence. In 1819 it was incorporated, only 40 years ago; and already it has become the third city of the Union—New York and Philadelphia only exceeding it in population. We may also give it the same rank in wealth and importance. The report claims for it 250,000 inhabitants; and styles it the most extensive provision market in this or any other country, famous for the skill and enterprise of her mechanics, the extent of her manufactures, and the wonderful progress and magnitude of her commerce, now reaching probably \$200,000,000 annually.

Commercially, and financially, the past year has been one of general prosperity; and the increase in the commerce and industry of the city has been at once large, legitimate and healthy. The dark clouds which obscured the business horizon in 1857 and 1858 have all been dispersed during the past year, and prosperity has once more revisited its former abode. Buildings, massive and extensive, have been erected, old buildings have been replaced by new, new streets opened, and the city vastly extended over the available vicinity, especially on the west side. The expansion of commerce has been noteworthy. The increase in the grocery trade particularly will attract attention. The imports of coffee increased 11 per cent., of sugar 30 per cent., and of molasses 60 per cent. One-sixth of all the sugar, and one-fifth of all the molasses of Louisiana found a market here, and also an eighth of all the coffee imported into the United States from Brazil; and notwithstanding these heavy importations, they were not in excess of the demand. The exports have also largely increased both in amount and value. Capital has been abundant and easily obtained upon acceptable security, at 10 to 12 per cent., and exchange on the east has been kept down to ½ and ¾ premium. All this exhibits a state of unprecedented prosperity, and an ability in the West which is highly agreeable to contemplate, so soon after the financial revulsion to which all interests have been subjected.

Referring to the footings of a synoptical statement of the value of the manufactures of the city, we find that in 1840 the amount was \$17,780,033; in 1850, \$54,550,134, and in 1859, \$112,254,000, having tripled in the first ten years, and more

than doubled in the next nine years. The value of the leading products manufactured at these periods has been as follows:

	1840.	1850.	1859.
Agricult' implement's and machinery..	\$36,000	\$78,000	\$1,290,000
Alcohol and spirits of wine.....	145,000	608,260	2,260,000
Ale and beer.....	126,000	566,000	1,500,000
Boots and shoes ..	488,000	1,182,650	1,750,450
Butcher's meat ...	1,098,015	2,850,000	4,370,000
Candles, lard, oil, &c	353,940	4,490,900	6,114,500
Carpen'r and building work	418,600	2,116,000	2,760,000
Clothing.....	1,223,800	1,947,500	15,000,000
Cooper ware	167,000	387,000	1,510,000
Feed and flour....	816,700	1,690,000	3,216,000
Foundry castings.	668,657	3,676,500	6,353,400
Furniture	676,800	1,660,000	3,656,000
Iron, bar, sheet, etc., and nails ..	394,000	1,146,000	4,334,000
Iron, wrought, etc. ....	.....	.....	1,000,000
Liquors, domestic.	145,000	726,000	3,600,000
Medicines, patent.	68,000	952,000	1,960,000
Millinery	120,000	820,000	1,750,000
Pork & beef pack'g's.	874,912	5,760,090	6,300,000
Publications, books newspapers, etc.	518,500	1,276,540	2,610,050
Sashes, blinds, doors etc	71,700	312,000	1,380,000
Stone cutting.....	83,000	222,000	1,125,000
Tailoring	276,000	832,000	2,035,000
Tanneries	335,000	965,000	1,520,000
Tobacco, snuff and cigars	325,000	931,000	1,667,000
Whiskey	145,000	2,857,920	5,318 730

In the above no products are included but those which were valued at a million and upwards in the last year. This table is followed by a detailed statement of each of the products of trade separately, and the import and export of each for a series of years.

The following table compares the imports and exports in the two past years, 1858 and 1859:

	1858.	1859.	Increase.
Imports ..	\$83,644,747	\$96,213,274	\$12,568,527
Exports ..	91,906,506	107,007,707	15,101,201

Total...\$175,551,253 \$203,220,981 \$27,669,728

The arrivals and departures of steamboats during the years 1855-6, and 1858-9, inclusive, are showing in the annexed:

ARRIVALS.				
From	1855-6.	1856-7.	1857-8.	1858-9.
New Orleans...	143	127	158	172
Pittsburg	530	385	414	340
St. Louis	279	315	262	263
Other ports....	1,844	1,878	2,334	2,381
Total	2,796	2,703	3,168	3,106
DEPARTURES.				
	1855-6.	1856-7.	1857-8.	1858-9.
New Orleans...	146	101	153	182
Pittsburg	453	393	392	330
St. Louis	374	376	237	244
Other ports ...	1,810	1,781	2,408	2,116
Total	2,783	2,648	3,190	2,872

The number of steamboats and barges which have run between Cincinnati and other ports for each year since 1850 has been as follows:

	Number.	Tonnage.
1850-51.....	233	49,274 Tons.
1851-52.....	203	50,542 "
1852-53.....	298	76,647 "
1853-54.....	314	80,266 "
1854-55.....	318	80,874 "
1855-56.....	365	92,401 "
1856-57.....	357	87,458 "
1857-58.....	319	74,483 "
1858-59.....	327	78,222 "

The following shows the whole number, with the tonnage of steamboats and barges built, for each year since 1847-58:

	Number.	Tonnage.
1847-48.....	29	10,233 Tons.
1848-49.....	23	7,281 "
1849-50.....	16	4,560 "
1850-51.....	31	8,206 "
1851-52.....	33	8,696 "
1852-53.....	29	10,252 "
1853-54.....	31	9,858 "
1854-55.....	27	8,698 "
1855-56.....	33	11,526 "
1856-57.....	34	10,600 "
1857-58.....	14	5,334 "
1858-59.....	11	3,735 "

Such is in brief a view of the commerce and industry of this city. It is but a type of the general progress and prospects of the country. Pittsburgh, Louisville, St. Louis and Chicago can probably show equally satisfactory results for the year. New Orleans has already reported, and shows a large increase of commerce over any former year; and what with the redundant harvest with which we have been blessed may not the next year bring forth.

Cost of Transporting Coal on the Baltimore and Ohio Railroad.

The following estimates of the actual cost to this company of transporting coal from Piedmont and Cumberland to Baltimore, were made by an experienced and competent official connected with the practical working of the road:

The cost of transporting one ton of coal from Piedmont to Baltimore, 206 miles, is:

For locomotive and train expenses, due to hauling one ton of coal.....	71.7
Repairs of coal cars.....	17.7
Maintenance of railway bridges, &c.....	49.4

Total cost.....138.8

The cost of transporting one ton of coal from Cumberland, 180 miles, to Baltimore, is:

For locomotive and train expenses, due to hauling one ton of coal.....	65.7
Repairs of coal cars.....	15.4
Maintenance of railway bridges, &c.....	43.2

Total cost.....124.3

In the calculation from which the above results are obtained, no expenses are taken into consideration but those immediately connected with the coal trade, or in other words, it is intended to represent the amount of money expended by the Baltimore and Ohio Railroad Company to enable them to haul one ton of coal (2,240 lbs.) from Piedmont and Cumberland to Baltimore, whilst they are at the same time engaged in a general transportation and passenger business, maintaining the expenditure necessary thereto.

Gulf and Ship Island Railroad.

The design of this road is to build up the interests of Mississippi. It proposes to run from the coast of that State, somewhere near Mississippi City, up through the centre of the State. A route has already been laid off to cross the Southern road about fourteen miles east of Brandon. Some of the Mississippians feel a State pride in this matter, as it is believed that it will build up a State commercial metropolis which can successfully compete with New Orleans and Mobile in the cotton trade, by virtue of the fine port near its proposed terminus on the coast.—*Livingston (Ala.) Democrat.*

Pittsburg and Connellsville Railroad.

The first payment of \$5,000 has been made to the parties having the contract for the construction of their section of this road, between Turtle Creek and Pittsburg. The work is being rapidly pushed towards completion.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending September 20, 1859.

BONDS.	Per cent.	
Little Miami, 1st Mort.	6s. 55	and int.
Covington and Lexington, 2d Mortgage.....	7s. 60	
Ohio & Miss., R. D., Construction.....	7s. 25	
Cinc., Ham. and Dayton, 2d Mortgage.....	7s. 82½	
Indianap. & Cincinnati, do. do.	7s. 82½	
STOCKS.		
Cincinnati, Hamilton & Dayton.....	70	
Columbus and Xenia.....	33	
Indianapolis & Cincinnati.....	50	
Little Miami.....	26	

Railroad Earnings.

The earnings of the Central Railroad Company of New Jersey, for the month of August, 1859, were.....\$91,746 86
For August, 1858.....77,845 30

Increase, 18 per cent.....\$13,901 56

The earnings of the Ohio and Mississippi Railroad Company for August, 1859, were, \$166,777 23
August, 1858.....146,297 99

Increase.....\$20,479 24

The revenue of the Baltimore and Ohio railroad, for August, 1859, was:—

MAIN STEM.	
Passengers.....	\$68,502 66
Mails.....	7,833 34
Express.....	3,929 97
Tonnage.....	246,914 97
	\$327,180 94

WASHINGTON BRANCH.	
Passengers.....	\$30,075 29
Mails.....	1,000 00
Express.....	1,350 00
Tonnage.....	6,144 44
	38,569 73

N. W. VIRGINIA BRANCH.	
Passengers.....	\$3,533 38
Mails.....	866 66
Tonnage.....	6,790 21
	11,190 25

Total.....\$376,940 92

Compared with the same month in 1858, the returns show the following result:

	Aug., 1859.	Aug., 1858.
Main stem.....	\$327,180 94	\$315,058 92
Washington branch.....	38,569 73	40,913 16
N. W. Virginia branch.....	11,190 25	14,539 28

Totals.....\$376,940 92 \$370,511 36

Increase.....\$6,429 56

Revenue of July, 1859, compared with August, 1859:—

MAIN STEM.	Passenger.	Tonnage.	Totals.
Aug., 1859.....	\$68,502 66	\$258,678 28	\$327,180 94
July, 1859.....	59,982 35	207,296 42	267,278 77

Increase...\$8,520 31 \$51,881 86 \$59,902 17

WASHINGTON BRANCH.	
Aug., 1859.....	\$30,075 29
July, 1859.....	26,467 80
	\$3,607 49

Increase...\$3,607 49 2,022 02 \$5,629 51

N. W. VIRGINIA.	
Aug., 1859.....	\$3,533 38
July, 1859.....	2,179 77
	\$1,353 61

Increase...\$1,353 61 878 69 \$2,232 30

Passenger incr.....	\$1,353 61
Tonnage decr.....	878 69
Total increase.....	\$474 82
Total increase of passengers in Aug., 1859, over July.....	13,481 41

Total increase of tonnage on Main Stem and Washington branch.....53,403 88
Less decrease on tonnage on the North-western Virginia railroad.....878 79

Total increase of tonnage over July...\$52,525 09

Total increase of revenue on the 3 roads, \$66,006 50

The comparison of the earnings of the present with those of the last fiscal year, shows the following results:

	1858.	1857.
October.....	\$392,503 02	\$396,191 85
November.....	383,159 22	361,448 38
December.....	336,861 01	379,259 02
	1859.	1858.
January.....	327,176 03	317,518 73
February.....	321,391 10	277,085 49
March.....	410,061 21	439,256 23
April.....	369,067 33	483,558 45
May.....	397,959 53	397,770 07
June.....	359,029 01	400,730 00
July.....	310,934 42	358,604 65
August.....	376,940 92	370,511 36
	\$3,985,083 21	\$4,184,874 23
Decrease present y'r., \$199,791 02		

The following statement shows the business of the Philadelphia and Reading Railroad Company, for the month of August, 1859, compared with the corresponding month of last year:—

	1859.	1858.
Received from coal.....	\$173,851 02	\$190,171 06
Do. merchandise.....	31,433 92	27,090 70
Do. travel, etc.....	36,410 39	29,798 06

Total.....\$241,695 33 \$247,068 82

Transportation, roadway, dumpage, renewal Fund, and all charges.....126,995 54 122,862 85

Net profit for the m'th...114,700 09 \$124,205 97
Do. for previous 8 mos. 735,868 06 646,540 50

Total net profit for 9 months.....\$850,568 15 \$770,745 47

The following statement represents the monthly receipts of the Sixth and Eighth avenue railroads since January 1, according to the reports made at the Comptroller's office:—

	Sixth Av.	Eighth Av.
January.....	\$25,373 46	\$29,847 77
February.....	22,166 63	26,274 02
March.....	26,435 87	31,326 53
April.....	27,099 85	31,828 87
May.....	30,404 00	35,554 66
June.....	28,793 88	34,167 72
July.....	27,876 21	34,630 37
August.....	28,553 98	33,682 23

Total.....\$216,703 38 \$256,980 17

It will be seen that the month of May was the busiest on both roads, and the month of February the other extreme. The average number of passengers in a month on the Sixth avenue road was, therefore, 541,738; in one day, 18,058. On the Eighth avenue road the average number of passengers in a month exceeds that of the Sixth by about 10,000; daily, about 330.

The receipts of the Grand Trunk Railway of Canada for the week ending Sept. 10,

were.....\$48,758 68
Week ending Sept. 11, 1858.....41,763 80

Increase.....\$7,004 88

Total traffic from July 1st.....\$432,785 15
Same period last year.....408,738 09

Increase.....\$23,997 06

Staten Island Railroad.

The Staten Island Railroad is being pushed forward as rapidly as possible. A very fine substantial bridge has been thrown over Chestnut avenue at Clifton, which will cost about \$1,000. In filling in the meadows, the new earth sinks two or three feet in a night, displacing the black mud, which rises up on each side. The north-western end of

the road, near Tottenville, will be equipped first; that portion has been thoroughly graded and settled. It is anticipated that the road will be in operation by Christmas.

American Railroad Journal.

Saturday, September 24, 1859.

ERRATUM.—In the tabular statement accompanying our article upon the New York and Erie Railroad in last week's issue, under the head of "Passenger Traffic," the receipts from the transportation of passengers for 1858, are stated at "\$1,682,258," instead of \$1,182,258. This error is the more annoying from the fact that in the remarks immediately preceding the table, particular reference is made to this column of figures. We think we can vouch for the correctness of every other figure in the statement.

Sale of Pacific Railroad Lands.

The Pacific railroad company of Missouri have put on the market a large amount of free lands. These lands are situated in the counties of St. Charles, Jefferson, Washington, Franklin and Crawford, on both sides of the main line, and South-west branch of the Pacific railroad, and comprise upwards of 125,000 acres. The sales will commence at the Court House in St. Louis on the 3d of October. On that and the following day, 6,869 acres in St. Charles county will be offered; on the 5th will commence the sale of 36,571 acres in Jefferson county; on the 11th the sale of 35,410 acres in Washington county; on the 17th of 34,241 acres in Franklin county; and on the 21st of 18,328 acres in Crawford county.

The company have issued a pamphlet giving a full and minute description of these lands, so that any one by inspecting it can inform himself exactly what advantages each tract possesses, whether in regard to soil, timber or mineral prospects. He can ascertain whether it is upland or bottom, or mixture of both; whether watered or not; whether heavily timbered, and the kinds of growth upon it; the minerals discovered upon it, and in many cases exact distance from the road, or from a depot.

Albany Northern Railroad.

This road is 32¾ miles in length, extending from Albany to Eagle bridge, at which point it forms a connection with the Rutland and Washington Railroad, and through that road, with the Rutland and Burlington, Vermont Central, and Vermont and Canada roads. Its construction was commenced in 1851, and completed in July, 1853. The original capital of the company was 6,000 shares of the stock, of the par value of \$100 per share. But this was not all paid in, the revenues from the sale of stock amounting to but \$439,004 97. To aid in the construction of the road there were issued and realized

First mortgage bonds	.....\$600,000
Second do.	..... 500,000
Third do.	..... 45,600
Fourth do.	..... 364,339

Making a total realized of....\$1,509,399

In 1854, the property passed into the hands of Receivers, and was by them operated until something more than a year ago, when a sale was made by the Trustees of the second mortgage bonds. For some reason this sale was never con-

summated, and default being made in the payment of interest on the first mortgages, they were foreclosed, and the road sold on the 14th inst. at Albany to Hon. Abijah Mann, who, in trust for a portion of the holders of the first bonds, pays the sum of \$25,000 for the property—taking it subject to demands yet to be liquidated, which may reach \$130,000.

With the exception of \$500,000 of the first mortgage bonds, which it is understood Mr. Mann represents, the total capital is annihilated by this sale, viz:

Stock subscriptions	.....\$439,004 97
Bonds	.....1,509,399 00
Total capital	.....\$1,948,403 97
Interest on this 7 years	..... 975,717 89
Floating debt in 1854	..... 100,000 00
Interest 5 years	..... 35,000 00

Total.....\$3,059,121 86

—From which is to be deducted the amount of the purchase money, \$25,000, leaving a loss of \$3,034,121 86 to be divided among the stockholders and those who purchased the bonds.

Pennsylvania Tonnage Tax.

When the Pennsylvania Railroad Company was chartered, it was made a condition that the tonnage carried over the works it might construct, should be subject to a certain tax. This was considered an absolute necessity in order to indemnify the State for any anticipated injury that might accrue to the State works from competition; and until December last the tax had been submitted to by the company without complaint. But at the latter date the Pennsylvania railroad company had purchased the very works from the State which this tax was originally designed to protect; and hence the tax ought in justice to have ceased. The State authorities, however, decided otherwise; but the company by advice of council, withheld the usual payment. Hence a law-suit, which from its interest to the commercial world, has attracted universal attention. In another part of this day's issue we have given an abstract of the cause as presented by the parties contestant and also the opinion of the judge before whom it was tried, and the final verdict. So far as the result is concerned we are satisfied that it is *legally* correct; but *morally* and in all *equity* the company ought not to be saddled with a *legal wrong*. The case will be carried up to the higher courts, and probably with a like adverse result. But in our opinion this is scarcely a matter for the courts: relief ought to be sought in the abrogation of the law imposing the tax. Such an abrogation is necessary not only for the relief of the company, but also for the interests of commerce; and since the motive for the continuance of this odious tax has been removed, we are unable to conceive on what basis its future continuance can be advocated or maintained. Under any circumstances, the imposition of such a tax on commercial intercourse would be impolitic, and, in the present instance, is arbitrary and oppressive, a wrong to a section and of benefit to no portion of the State.

The Chenango Canal.

The surveys for the Chenango Canal extension are rapidly going forward, the party of engineers having already reached Camprille.

St. Louis and Memphis Railroad Project.

Among the anomalies of the railroad system of the Mississippi valley, is the non-existence of a direct railroad between St. Louis and Memphis. The indirect route by Sandoval, Cairo, etc., is too long and inconvenient, and requires too frequent transshipment to become at all eligible for the pressing wants of the commerce between the two places. The distance by a direct line is stated at 279 miles—that by the indirect line, including 20 miles of steamboating between Cairo and Columbus, is 350 miles. The latter distance is involved in five several lines, viz: The Ohio and Mississippi, from St. Louis to Sandoval, 61 miles; the Illinois Central, from Sandoval to Cairo, 118 miles; Steamboat Line, from Cairo to Columbus, 20 miles; the Mobile and Ohio Railroad, from Columbus to Humboldt, 69 miles; and the Memphis and Ohio, from Humboldt to Memphis, 82 miles; and such is the only present route, except that wholly by steamboat on the river, 420 miles, between these great marts of commerce.

Of the projected route, 85 miles are already in operation, extending from St. Louis south to Pilot Knob, one of the great Missouri iron mountains, and hence the length of new road required to complete the connection is, at most, 194 miles, and it is believed that even this distance may be reduced on a full examination and accurate survey, so as not to exceed 180 or 185 miles.

To give some idea of the grades of the proposed road, it may be stated that the St. Louis and Iron Mountain Railroad reaches its maximum, 735 feet, at its southern terminus; and beyond this, 94 miles from St. Louis, the elevation is 780 feet above the level of that city. From this point, after descending southward for a distance of 22 miles, the road is again on a level with St. Louis; and 38 miles further south, to or near Indian Ford, in the "flat lands," 153 miles from St. Louis, it reaches a level, 38 or 40 feet below the assumed base.

It will thus be seen that the serious and heavy part of the projected road is confined to the 20 miles next to the Iron Mountain region, and charging this section on the average of the Iron Mountain Railroad, it would cost only \$37,166 per mile. The remaining sections to Memphis will be the cheapest part of the whole, being through flat lands, and the cost is rated at almost one-half that of the elevated sections, or \$18,500. Such is the estimate of the engineers of the St. Louis and Iron Mountain Railroad.

Their report sets down the figures for the "probable expenditures to put in operation the whole road to the Arkansas line," on the route therein suggested, at \$8,104,640, namely: \$4,800,000 to Pilot Knob, (85 miles,) and \$3,304,640 from Pilot Knob to the Arkansas Line, (133 miles.) The cost of the Arkansas section of the road, 61 miles, is estimated at \$1,098,000. The unfinished portion of this route is, therefore, to cost \$4,402,640, or in other words, the 194 miles to be constructed is to cost \$397,360 less than the 85 miles already constructed! This would, nevertheless, average about \$22,700 per mile, and is probably as much as an economical administration would demand.

But at whatever moderate cost, this road ought to be and must be built; or some other road having the same termini. This link in the system, in-

deed, is too important to be longer neglected. Memphis is already connected by railroad with New Orleans on the South, and Savannah, Charleston, Richmond, and Baltimore, on the Atlantic coast. This railroad, now under consideration, would give to St. Louis the same outlets, and Memphis and its correspondent ports would, on the other hand, have access through St. Louis, with the whole upper region of the great interior valleys, and with the country of the great Lakes.

But while advocating any connecting road between these points, we may be allowed to suggest other routes; and the one that appears to our mind as being most eligible would depart from St. Louis by the Iron Mountain Railroad, and so continue on that line (already constructed) to the point where it leaves the Mississippi, some 26 or 27 miles from the point of beginning, and thence following as direct a course as possible, terminate at a point opposite Hickman, Ky. The length of new line required would be about 140, or probably 150 miles. At Hickman the Nashville and North-western Railroad commences, and after a course of say 18 miles reaches Union City, connecting there with the Mobile and Ohio Railroad, and at Humboldt, on the latter road, the Memphis and Ohio Railroad forms a connection. Together, these roads would give a distance, between the two cities, of 321 miles, as follows:

By the St. Louis & Iron Mountain R.R.	27 miles.
By the new road	150 "
By the Nashville & North-western R.R.	18 "
By the Mobile and Ohio Railroad	44 "
By the Memphis and Ohio Railroad	82 "

—a length somewhat superior to the projected road, of which we have hitherto spoken, but immensely superior to it in its Southern connections. It would, in fact, bring St. Louis into direct connection not only with Memphis, but also with Nashville and the Atlantic ports by the shortest routes, and also with Mobile and New Orleans. It would, moreover, involve a less original capital in its construction, first by avoiding the high grades in the Iron Mountain regions, and secondly, by the shorter length of the line to be constructed. It must be remembered that the Mobile and Ohio, and the Mississippi Central, connect at Jackson, 18 miles south of Humboldt, or 62 miles from Hickman, and are thence continued south directly to Mobile and New Orleans, respectively.

Alabama and Florida Railroad.

We learn from the *Montgomery Mail* that the Alabama Company has concluded the purchase of two thousands tons for the continuation of this road below Greenville. This, with what was before secured, will iron 35 miles of the road. Track-laying below Greenville, will be resumed in about ten days, and continue until the entire line is finished.

The Florida Company have completed a negotiation for iron enough to lay the track within the limits of that State. The friends of the enterprise look forward to the completion of the whole work from Pensacola to Montgomery by the close of next year.

Boston and Maine Railroad.

The following gentlemen have been re-elected Directors of this road for the ensuing year: Francis Cogswell, James H. Duncan, George W. Kirtledge, Daniel M. Christie, Peter T. Homer, Israel M. Spelman, Henry Saltonstall,

North Missouri Railroad.

We learn from the St. Louis papers that the proposition of the Messrs. Kelly to finish this road from the junction to Lancaster, at the rate of \$15,000 per mile, has been accepted and the contract signed. The work is to be commenced at once on the line of the road from Macon City, north of the junction with the Hannibal and St. Joseph Railroad. The contractors are ready, having their shanties erected, their teams, &c., on the ground, and hay cut for the winter. The Board directed an order to be made to the counties of Schnyler and Adair, to pay up thirty per cent. of their subscriptions—\$50,000 each—and it is understood that these counties will at once comply with this request. Beyond Lancaster, the people of Iowa are willing and anxious to construct the road to Ottumwa.

Interest and Dividends.

The Philadelphia, Wilmington and Baltimore Railroad Company has declared a semi-annual dividend of three per cent., payable October 1st, to holders 15th inst., and leaving a surplus for the year of \$123,000—over two per cent. of the capital—after deducting all expenses and appropriations to the sinking fund.

New York and Erie Railroad.

Mr. Satterthwaite's London Circular suggests the following plan for the re organization of this company:

The New York and Erie Railroad has paid the penalty of its faulty organization under its charter powers, and has fallen into the hands of the law courts.

Under the existing deficiency of net revenue to provide for the interest on all its bonds, and with the whole Sinking Fund Loan of 1857 being due from default of payment of interest and sinking fund, according to the terms of its issue, and with the power of \$4,000,000 Second Mortgage Bonds, due 1st March, 1859, to demand payment or to foreclosure, we conceive the appointment of a Receiver, with a view to a speedy sale of the road, and organization of a new company on a better basis, to be the wisest course for all parties concerned.

It is estimated that whatever form may be adopted, at least \$1,000,000 must be raised by the new organization, to pay employees and to keep the mortgage creditors from foreclosing in an unfriendly manner.

It is evident that it must be the great aim of all parties interested in the organization of the new company, so to frame it that those parties who pay the \$1,000,000 shall not throw good money after bad, and to insure this, the lower the amount of mortgage debt, the safer will it be to subscribe. In this view to foreclose under the Fourth Mortgage would be the safest for all parties, unless it can be proved beyond a doubt that the company can easily earn more than the interest on the Fourth Mortgage and maintain the road. We believe the new organization will be best effected under the General Railroad Act of the State of New York, and that no scheme of Preference Stock can be allowed under that Act. It would result, therefore, that the capital of the new company must consist of Stock and Bonds only.

In case the Fourth Mortgage will consent to arrange with the other interests, the new stock would be for \$12,000,000, to be divided in such proportions as can be agreed on; but if the Fourth Mortgage prefer to take the road themselves they can do so, unless the unsecured bondholders bid such a price for the road as takes it out of their hands and pay the arrears of interest.

We do not feel it timely to dictate any plan, but we believe that the deputation about to go out will meet, on their arrival in New York, with a committee who will have had suggestions made from

every interest concerned, and that the benefit to all parties in this country will be very great in having some gentlemen, at this crisis, ready and able to represent them in America.

We would suggest the following plan as being, in our opinion, a safe one, if all parties can be brought to agree:

Proposed basis of capital for New Company	\$25,000,000
First mortgage	\$3,000,000
Second mortgage	4,000,000
Third mortgage	6,000,000

Bonds to stand as they are	\$13,000,000
Leaving as capital to be raised and divided	\$12,000,000

Cash capital known to be required, to be raised by the future purchasers of the road, to form part of the new stock to be arranged by the various parties, in interest, in fair proportions, \$1,000,000 as under:

Fourth mortgage, \$3,600,000, allow stock at par without payment	\$3,600,000
Fifth Mortgage, \$1,200,000	
1862) Bonds, 8,000,000	
1871)	
1875)	
\$8,000,000—5½ per ct. or \$506,000 cash,	
9,200,000—69½ " " 6,394,000 st'k,	
75 " " \$6,900,000	6,900,000
Stock, \$11,000,000 allow \$1,000,000 st'k	
500,000 cash	1,500,000

	\$12,000,000
On this basis the annual charge would be 7 per cent. on \$13,000,000 mortgage bonds ..	\$910,000
Rents and leases	100,000
Capital required to maintain road, from revenue	200,000

Annual charge	\$1,210,000
The revenue for this year, say	\$4,500,000
Expenses	3,000,000
	\$1,500,000
Deduct annual charge	1,210,000

Or about 2½ per cent. on \$12,000,000 stock	\$230,000
---	-----------

The Wealth of Wisconsin.

The Wisconsin Secretary of State furnishes the following figures of the wealth of this State:

	1858.	1859.
Number of acres.	16,493,518 05	17,411,318 79
Value per acre		\$5 90½
Aggregate value.	\$110,269,274 05	102,814,502 14
Aggregate value of city and village lots	40,655,647 73	36,115,304 82
Aggregate value of person's property	25,522,577 15	13,607,893 04
Total aggregate ..	177,820,765 96	172,537,700 00

Returns of personal property have fallen off immensely in consequence of the deduction of debts from personal property, authorized by the present assessment law.

Virginia Central Railroad.

It is stated that by the recent 4½ per cent. dividend of the Virginia Central Railroad Company, the Treasury of the State will receive \$90,000. The State has an investment of \$2,000,000 in the stock of the company.

Osage Valley Railroad.

The work of construction was commenced upon this road at Tipton on the 21st ult. The Osage Valley road branches from the Pacific at Tipton, and is intended to run south-westwardly to the Missouri border, and thence through Southern Kansas.

Sunday Street Railroad Travel.

The Chairman of a Committee in Philadelphia for procuring the repeal of the law forbidding Sunday travel, recently addressed letters to the Mayors of New York, Brooklyn and Boston, inquiring whether the running of the Street cars on Sunday in those cities, had proved detrimental or otherwise to the morals of the community. In reply Mayor Tiemann, of New York, says:

I know of no instance of any riot or other disorder having occurred in consequence of the running of such cars on Sunday, nor of any great gathering of disorderly or other persons at the several termini of our railroads on that day. The practice has, on the contrary, been found of great convenience to all classes of our citizens—and the cars, although used on the day alluded to chiefly by a different class from those who travel in them on week days, still many of our best citizens, intelligent and religious, avail themselves of the public accommodation afforded by these cars on Sundays, in going to and from the several churches in our city, and in other acts which the most strictly religious would admit as compatible with the observance of that holy day.

There are some six lines of railroads in our city, all of them running from the lower to the upper part of it, and two of them extending their trips as far as Harlem, a distance of eight miles from the lower termini; and although they are filled with passengers, more than on other days, no disturbance has ever, to my knowledge, occurred in them, or in consequence of their running on that day. * * *

In a city with a small population, I will admit there can be no great public necessity for these conveyances on Sunday, but in a large and densely populated metropolis, situated on an island, extending in its extreme length from eight to thirteen miles, and not more than two miles wide in any part of it, they are absolutely required to be run as well on Sunday as on other days. In this respect I believe that all classes of our community acquiesce.

Mayor Lincoln, of Boston, writes:

The propriety of the horse railroad cars running on the Sabbath, I believe, has never been seriously discussed, either by the City Council or the public press. I think it would be a serious evil if all our roads should run on that day; but they do not; only three carry passengers on that day, and they only to a limited extent.

The Metropolitan Railroad does the most business, and runs on Sunday, and connects us with the city of Roxbury. The greater portion of the travel, however, is from Ward Eleven, the southerly section of the city. This part of the city has recently been built, and its inhabitants are mostly those who have moved from the other wards, but are still connected with the churches down town. The railroad furnishes them a means to keep up their connection with their accustomed places of worship. I believe it is generally used by people of all denominations, although I have heard occasionally of a clergyman or some other conscientious person object to the mode of conveyance. The cars seem to run with less noise and confusion than on other days; the bells are not rung, and there is evidently an effort on the part of the conductors to observe the proprieties of the Sabbath.

I have no doubt that to some extent they are urged as a matter of pleasure, but the evil that was apprehended, that large companies of idlers would rush into the country, and spend the day in dissipation, much to the discomfort and peace of the inhabitants of the suburbs, has not been realized in fact. There is a general regard for the Sabbath in our city and vicinity; it is not kept as strictly as it was by our fathers, but yet a good sentiment pervades all classes of our people, and seldom is anything seen which is objectionable."

Mayor Powell, of Brooklyn, thus expresses his views:

In a communication to the Common Council, on the 5th of January, 1867, (a copy of which I send

you,) I recommended, for the reasons therein set forth, the running of rail cars on Sunday. The subject was taken up and fully discussed by the Common Council and the citizens generally. Public meetings were held, and the project was severely denounced by many of the clergy and our leading citizens, as being a desecration of the day, and that it would lead to riot and disorder, and tend to all sorts of evil, especially in the suburbs of the city.

That they were sincere in these views no one can doubt. But, as I think, fortunately, their views did not prevail, and the cars were set in motion, and have now been running more than a year with the most gratifying results. Feeling in a great degree responsible for the measure, I watched its effects with some solicitude, and find that, while the cars are filled during the day with passengers, they are, with scarcely any exceptions, of the most orderly and respectable class of our citizens, and, I think, a large majority are females. I have not heard of a single complaint from the people living in the suburbs, of anything like disorder or riotous assemblages; and, from repeated personal observation, I am sure that no cause of complaint exists. The cars are likewise patronized to a great extent by our church-going people, and many extras are required to accommodate them at the close of the evening services.

In fact, so general is now the acquiescence of the people in this measure, that I am convinced if it was brought to the test of a popular vote, that an overwhelming majority would approve it. One of the great benefits experienced in running the cars is, that it prevents the thoroughfares from being overcrowded. Before they were in use, the sidewalks were crowded with pedestrians, to that extent, frequently, that it was difficult to get along with comfort; and the change that has been produced in this respect is remarkable, and is noticed by all who have occasion to travel on that day. In short, from every point of view, I think the benefits we derive from the accommodations of Sunday travel far outweigh the evils, real or imaginary, that attend it.

Alabama and Florida Railroad.

The last link of a great unbroken chain of railroads, connecting the Gulf of St. Lawrence with the Gulf of Mexico, is the road now in vigorous progress from our State Capital (Montgomery) to Pensacola. Let any one cast a glance on the map and he cannot escape the conviction that this last short link—about 170 miles of road through mostly a level country—was a predestined and inevitable necessity; and that the natural terminus of this colossal railway chain of over 2,000 miles is a harbor—one of the best, if not the very best, on the Gulf of Mexico. By direct connection with the rich coal regions of Alabama, this port must become a great coaling station, facilitating the operations as well as promoting the establishment of steam lines in the incalculable expansive Brazilian and Central American trades, and in other respects cannot fail to grow eventually into a place of very considerable importance. The project of this road to Pensacola once excited some uneasiness in Mobile, whose interests are by some thought to be jeopardized by its execution. Even were it so, it is unwise to shut our eyes to disagreeable facts, it is the part of prudence to meet them early and face them boldly. But we cannot believe that anything tending to develop the resources of Alabama, and to increase the wealth and greatness of the South, will ever conflict with the interests of Mobile. On the contrary, we believe it self-evident that no place will derive greater advantages from any new stimulus to the Gulf trade than our own city. This we are prepared to prove, if necessary, by undeniable facts and the simplest reasoning. Our present purpose is to awaken our people to the urgency of prompt and energetic action. The Alabama and Florida Railroad Company, under the management of the pioneer of railroad enterprise in Alabama, and one of the ablest financiers of the South, Mr. C. T. Pollard, is in a most prosperous and promising condition. All but 22 miles of the road is now

prepared for the reception of the rails, a portion of which is already purchased and on its way, or about to be purchased. To pay for the iron, the company has issued coupon bonds for the sum of \$550,000, payable 1st of July, 1869, and bearing interest at 8 per cent. The bonds being secured by mortgage on 400,000 acres of, for the most part, desirable lands, are expected to be taken readily at par, and, indeed, although but quite recently issued, \$30,000 have already been sold at par. The lands are valued at an average of \$3 an acre, and on the easy terms proposed, will, no doubt, meet with a brisk sale. In view of all these facts, the President announced to the stockholders at their last annual meeting that there is reasonable prospect of the connection with the Gulf being completed by the close of the year 1866.—*Mobile Register*.

Valuation of Worcester.

The annual valuation of Worcester has been completed. The real estate of the city is appraised at \$11,122,950; the personal at \$5,693,480; total \$16,816,430, an increase of \$480,430 since last year. Number of polls, 5,784. Rate of taxation—polls \$1 50, property \$7 per \$1,000.

Export Trade of New Orleans.

The fear was entertained when New York, Philadelphia, Baltimore, and Charleston, tapped the Mississippi valley, that the railroads connecting the Mississippi and the seaboard would seriously affect the commerce of New Orleans. Many supposed the products of the great Western valleys would go direct to the Atlantic across the country, instead of coming by the river to this city. To some extent this has been realized. To supply a sudden demand at any Eastern seaport, breadstuffs and provisions have been sent forward by rail; but the greater expense of transportation by land carriage has forbidden, and must ever prevent, a serious diversion of bulky Western produce over such routes.

The cheap freights on the Erie Canal secure more wheat, flour and provisions, than the two great New York railways can command. So the less cost of transport by flat-boat and steamer, will continue to control the direction of a large proportion of the products of the West, demanded for shipment to this port.

Passenger travel will follow the lines of railways; heavy freights continue to seek our great rivers. The result has been a change, to some extent, in the character of our river craft; capacity for large freights becoming more an object than speed. This feature of the steamers that ply on the Mississippi and its tributary streams, will become more and more general, until the present floating palaces, fitted out with almost Oriental magnificence, will be rare, the few remaining in the trade being calculated to supply a demand for the comfort of families, rather than to secure the profits of large cargoes.

The lines of roads perpendicular to and almost parallel with our great river, have been long enough worked to demonstrate the effect they are likely to have upon our receipt of Western produce, or the direction which the trade of the West is destined to take.

We are not of the opinion that the falling off in some of the leading articles of Western trade the past year results from the influence of railroad communication with the Atlantic seaboard. Statistics of the coast cities show quite as great a loss of Western business the past year as New Orleans has experienced. The absence of foreign demand for breadstuffs, and the hoarding upon plantations of tobacco in hopes of a higher price, will satisfactorily account for any loss we have experienced, and we may feel assured that as long as means exist for bulky freights to reach a market cheaper than by railways, they will follow the river, though not so soon placed in market.

The statistics of exports from New Orleans for several years past will show the soundness of this opinion, and prove that after making the experiment of sending produce to market over the rail-

roads constructed, shippers and producers have reverted to the old method of water carriage. We received, for the years, ending June 30:

1853	\$67,768,724
1854	60,176,683
1855	55,688,552
1856	30,547,963
1857	91,514,286
1858	88,332,485
1859	100,350,658

A glance at the table will show that, in 1854 and 1855, when the opportunity for reaching the Eastern seaboard by direct Eastern routes was first offered, a serious falling off in receipts at this port was felt; but subsequently the old trade returned, and has continued steadily to increase.

The inference is inevitable that Philadelphia, Boston and Baltimore, will not have availed themselves of all the facilities of trade which lie at their command, until they have established lines of steam communication or sailing vessels with this city. Nature has determined that we shall receive the bulk of Western produce which cannot cheaply reach the Erie Canal. The cities of the seaboard not in direct communication with this artery of water conveyance, must find means of connecting themselves with this city to control the highest possible amount of trade.—N. O. Picayune.

The Great Eastern.

As a matter of curiosity we append the tonnage of the Great Eastern, as compared with the principal vessels of the United States Navy:

Names.	Tonnage.
Pennsylvania	3,241
Columbus	2,480
Ohio	2,747
North Carolina	2,633
Delaware	2,633
Vermont	2,633
New Orleans	2,805
Alabama	2,633
Virginia	2,633
New York	2,633
Total	28,131
Great Eastern	26,000

Her tonnage is nearly as great as the combined tonnage of the ten tremendous line of battle ships—including the once unrivalled Pennsylvania—that are registered on the United States Navy list.

Association of Engineers.

The following are the officers of the National Association of Engineers for the coming year: President—R. M. Smith, of Pittsburg, Fort Wayne and Chicago Railroad. Vice President—Wm. Franklin, of the Baltimore and Ohio Railroad. Secretary—Chas. Fellows, of the Cleveland and Pittsburg Railroad. Corresponding Secretary—John T. Sheppard, of the Baltimore and Ohio Railroad. Treasurer—Wm. W. Wills, of the Pennsylvania Central Railroad. Finance Committee—Chas. W. Burger and C. R. Church, of the Pittsburg, Fort Wayne and Chicago Railroad.

The object of the Association is to obtain such legislative enactments in the different States as may be necessary to ensure a high standard of qualifications in applicants for the position of Railroad Engineers.

Mobile and Ohio Railroad.

The total receipts of cotton by this road at Mobile, the last year, were 137,430 bales. In 1858, they were 107,450 bales; in 1857, 79,254. The total earnings of the road during the last year were \$772,955; in 1858, \$617,501; in 1857, \$509,700.

Marletta and Cincinnati Railroad.

The Cincinnati Commercial of 16th inst. says:—We learn that passenger and freight trains passed over the Union road on yesterday. The Cincinnati and Parkersburg line is now operating to a point within four miles of Belpre, opposite Parkersburg.

Personal.

J. B. Moulton, Esq., has been elected Chief Engineer and Superintendent of the North Missouri Railroad, Major Robert Walker having retired from that post.

The Philadelphia Bulletin states that Charles Macalester, Esq., has been appointed Receiver for the Williamsport and Elmira Railroad Company.

Lake Superior Iron.

The Detroit Tribune, of Sept. 12th, says that the Wyandotte Rolling Mills are busy turning out 3,000 tons of Railroad bars, made from Lake Superior iron, for laying the track of the railroad between Lansing and Owosso. This work is to be carried to an early completion.

FAIRBANKS'



STANDARD SCALES,

Adapted to every branch of business where a correct and durable Scale is required.

SCALES FOR RAILROADS,
SCALES FOR COAL DEALERS & MINERS,
SCALES FOR HAY AND CATTLE DEALERS,
WAREHOUSE AND TRANSPORTATION SCALES,
PORTABLE AND DORMANT SCALES FOR STORES,
Scales for Grain and Flour Dealers,
Counter Scales, every variety,
BANKERS' AND JEWELLERS' BALANCES,
SCALES FOR FAMILY AND FARM USE,
WEIGH-MASTERS' BEAMS,
POST OFFICE SCALES, ETC., ETC.,

All of which are **WARRANTED** in every particular. Call and examine, or send for an illustrated circular.

FAIRBANKS & CO.,

189 Broadway, New York.

ROUND OAK IRON WORKS,

STAFFORDSHIRE.

LORD WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS AND BARS of every variety.

Address **RICHARD SMITH, Esq., Dudley.**

UNITED STATES OFFICES.

NEW YORK, No. 17 Nassau St.

BALTIMORE, over Farmers' & Mer. Bank.

NORRIS & BROTHER, Agents.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,
 13 CHURCH ST., N. Y.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. Guesar & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. I. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,

Boston, June, 1851.

29 Central Wharf.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 63, and 75 lbs. Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. Y.

Address **J. H. SCRANTON, President,**
 Scranton, Pa.
 or **DAVID S. DODGE, Treasurer,**
 46 Exchange Place,
 NEW YORK.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,

10 Wall st., near Broadway, N. Y.

500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or exship at ports in the United States.

M. K. JESUP & COMPANY,
 44 Exchange Place.

New York, 1st June, 1850.

WINDOW, PICTURE AND CAR GLASS.

F. HOPKINS & BROTHER,
 IMPORTERS,
 193 Pearl St., NEW YORK.

A GENTLEMAN who has upwards of 26 years experience in conducting an extensive machine manufacturing business (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation. Satisfactory evidence of business capacity and integrity will be furnished.

Address S. box 962 Baltimore Post Office. 3m32

METALS for RAILROAD COMPANIES.

LUCIUS HART,

IMPORTER AND DEALER IN METALS,
 4 and 6 Burling Slip, NEW YORK.
 BLOCK TIN. SWEETEN. BABBITT METAL.
 ANTIMONY. PIG LEAD. INGOT COPPER.

RAILROAD IRON.

WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA, North Penna. R. R. BUILDING OFFICE,
 No. 407 Walnut st.

MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA.

IRON AND STEEL IN ALL THEIR VARIETIES.

BOILER PLATE. CAR AXLES.
 BOILER RIVETS. RAILROAD IRON.
 CUT NAILS AND SPIKES. PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed. August 16, 1854.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

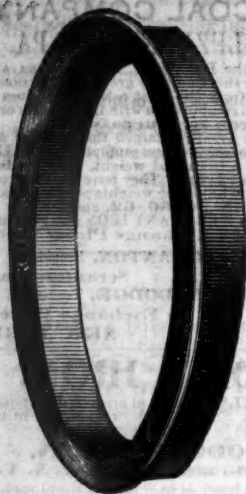
JAMES TINKER,

54 Exchange Place,

NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

THE FARNLEY IRON CO.,



Near LEEDS, Yorkshire,
MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely
the same as that of LOW MOOR and BOWLING,
being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COM'Y,

44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.



RAILROAD IRON.

THE undersigned, having been appointed Agents for
Messrs. BOLCOW & VAUGHAN, proprietors of the
ESTON, MIDDLESBRO', and WITTON PARK
IRON WORKS, YORKSHIRE, ENG.,
are prepared to contract for the sale of RAILROAD
IRON of a superior quality and on the most advantageous
terms.

MEAD & BELL,
17 William st., N. Y.

RAILROAD IRON.

The Crescent Manufacturing Company
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for
Rails of any required pattern and weight, and to re-roll
old rails, on the most liberal terms. Address

N. WILKINSON, Sec'y,
WHEELING, VA.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are pre-
pared to contract to deliver, free on board at shipping
ports in England, or at ports of discharge in the United States,
RAILS OF SUPERIOR QUALITY,
and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.

New York, Aug. 1, 1883.

RAILROAD IRON.

THE RENSSLAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may
be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:

BUSSENG, CROCKER & DODGE,
32 CHURCH ST.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.

LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.

CAR SPRING STEEL.

Far superior to the ordinary kind.

FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough

Steel. Gun Metal. Wire and Machinery Steel.

ORDERS FILLED PROMPTLY AND AT LOW PRICES.

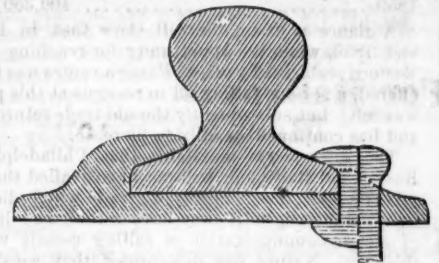
SALTUS & CO.,

45 CHURCH ST., New York.

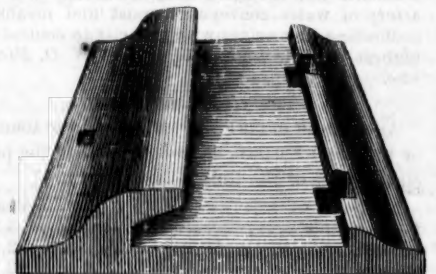
RAILROAD SPIKE COMPANY,

SUCCESSORS TO PORTER, ROLFE & SWETT,
MANUFACTURERS OF

RAILROAD SPIKES
AND CHAIRS,
PITTSBURG, PA.



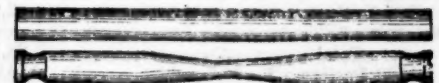
HAVING built a large Rolling Mill with new and improved
Machinery, we are fully prepared to execute orders at the
lowest rates, for any amount of SPIKES and CHAIRS
made of the best JUNIATA IRON.



Particular attention is invited to our NEW
WROUGHT IRON CHAIR, as being the best in
use.

DILWORTH & BIDWELL.

CAR AXLE WORKS.



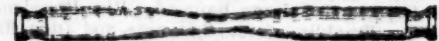
A. & P. ROBERTS,
PENCYD IRON WORKS,

OFFICE No. 410 WALNUT STREET,

PHILADELPHIA.

Roller or Hammered Car Axles, Bar Iron
and Forgings.

ST. LOUIS STEAM FORGE.



ROBERTSON & LOWE,

COR. MAIN AND CEDAR STREETS,

ST. LOUIS, MO.,

MANUFACTURE

CAR AXLES,

AND EVERY DESCRIPTION OF

LOCOMOTIVE FORGINGS.

ALSO,

STEAMBOAT SHAFTS, CRANKS, TOBACCO SCREWS,

HAMMERED BAR IRON,

AND EVERY VARIETY OF

Forgings for Machinery's Use.

Railroad Iron.

THE undersigned have American and Foreign Railroad
Iron for sale, deliverable in New York and other mar-
kets.

OASWELL & PERKINS,
Brokers, 69 Wall st.

New York, July 9, 1883.

RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per
yard, for sale at Chicago, also about
250 Tons English Rails same size and weight.

M. K. JESUP & COM'Y,
New York, June, 1883, 44 Exchange Place.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,

1 1/4 to 7 inches outside diameter, cut to definite length, 2 to 20
feet as required.

Wrought Iron Welded Tubes,

From 1/2 to 5 inches bore, with Screw and Socket Connections.
T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY

MORRIS, TASKER & CO.,

PASCAL IRON WORKS.

Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
STEPHEN P. M. TASKER.

RAILROAD IRON.

THE subscribers are prepared to contract for RAILS
delivered at an English port or at a port in the United
States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

JOHN W. HULL & CO.,
No. 41 Exchange Place, NEW YORK.

FAY, WOOD & CO.,

214 Pearl st., NEW YORK,

MANUFACTURERS OF

WHITE LEAD, ZINC,

COPAL VARNISHES AND

JAPANS.

Also, PUTTY, PAINTS and COLORS.

THE

RAILROAD IRON MILL COMPANY,

CLEVELAND, OHIO,

MANUFACTURERS EXCLUSIVELY OF

RAILROAD IRON.

THIS is a new ROLLING MILL, having been working
only eighteen months, and confined to work for roads on
this line between Buffalo and Chicago in re-rolling old Rails.
The capacity is Forty Tons per day. It is well situated for
receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will
be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,

President of the Incorporation

February, 1883.

THE IMPERIAL LUBRICATING OIL,

MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. HULL & SON.)

Nos. 108, 110, 112, 114, 116 & 118 Cliff St.,

NEW YORK,

**For Railroads,
Machine Shops,
Steamships,
Mills, etc.**

THIS OIL having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with **unqualified approval**, renders the manufacturers confident when making the following claims:—

1st. Its **first cost** is much less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will **not in any way gum or clog up** any journal or bearing, **all the gum in the Oil being entirely decomposed**.

3rd. It will keep all journals and bearings **cool, clean and bright** as new, thus not only **saving wear and tear**, but **saving also** no inconsiderable amount of **motive power**.

4th. It is **fully as durable** as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is **sweet and clean**, and **entirely free from all odor or unpleasant smell**.

6th. It will remain **limpid** at as low a temperature as sperm.

CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

TAW & BEERS,

DEALERS IN

**Sperm, Whale and Elephant Oils,
Adamantine Car and other Candles,**

AND MANUFACTURERS OF

TAW'S LUBRICATING GREASE

**FOR RAILROAD CARS
AND HEAVY MACHINERY.**

THIS celebrated GREASE has been in use upwards of **Ten years**, and is in the opinion of **FORTY RAILROAD COMPANIES**, whom we regularly supply,

The Cheapest and Best Lubricator in use.

Parties ordering, will please state the kind of box, or description of machinery.

**TAW & BEERS,
18 SOUTH WATER ST.,
Philadelphia.**

OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

**RAILROADS, STEAMERS, PROPELLERS,
AND FOR EVERY CLASS OF**

MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, **prove this Oil to be superior for Burning**, and **TWENTY-FIVE** per cent more durable than Sperm Oil, for Lubricating, and the only Oil that is in all cases **reliable**, that will keep bearings cool, and

WILL NOT GUM

In no case has it failed to meet the approval of the consumer. The *Scientific American* and *Manufacturer's Journal*, after testing this Oil, pronounce it **superior to any other for Lubricating**.—For sale **ONLY** by the Inventor

P. S. PEASE, 61 Main st., BUFFALO.

Reliable orders filled for any part of the United States or Europe.

UNION CAR WHEEL & TIRE WORKS,

JERSEY CITY, N. J.

MOORE & ADAMS,

MANUFACTURERS OF

**DOUBLE and SINGLE PLATE
CAR, ENGINE AND TRUCK WHEELS,**

MANUFACTURERS AND PROPRIETORS OF

MOORE'S PATENT**TRIPLE PLATE CAR WHEEL.**

**CHILLED LOCOMOTIVE TIRES,
Made from the best Charcoal Cold Blast Iron.**

HIRAM W. MOORE,**GEORGE ADAMS.**

G. C. LOBDELL. H. S. McCOMBS. D. P. BUSH.

BUSH & LOBDELL,

WILMINGTON, DELAWARE,

MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES, FOR RAILROAD CARS

AND

**Locomotive Engines,
ARE PREPARED TO EXECUTE PROMPTLY
ORDERS TO ANY EXTENT FOR THEIR**

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.

WHEELS FITTED

To HAMMERED or ROLLED AXLES,

IN THE BEST MANNER, AT THE SHORTEST NOTICE,

AND ON THE MOST REASONABLE TERMS.

A. WHITNEY & SONS

CAR WHEEL WORKS,

Callowhill & Sixteenth Sts.,

PHILADELPHIA, PENN..

FURNISH

CHILLED WHEELS,

FOR CARS, TRUCKS, and TENDERS.

CHILLED

Driving Wheels and Tires.

FOR LOCOMOTIVES.

ROLLED AND HAMMERED AXLES

WHEELS and AXLES,**FITTED COMPLETE.****A. N. GRAY, Cleveland, O.,**

**RECEIVER AND FORWARDER OF
RAILROAD IRON, CHAIRS & SPIKES.**

Also Cars, Locomotives,

AND ALL KINDS OF

MACHINERY FOR RAILROAD PURPOSES.

Office, next door to the Custom House, Main street.

JOURNAL

OF THE

**American Geographical and Statistical
SOCIETY.**

The Sixth Number of this Journal is now ready.

Subscription Price, \$3.00 per year, or 25 cents per copy.
Letters relating to the business of the JOURNAL are to be addressed to the Publishers

JOHN H. SCHULTZ & CO.,

9 Spruce st.,
NEW YORK.

FINANCIAL.

BANKING and COMMISSION AGENCY.

A. G. JAUDON,

No. 54 Wall street, NEW YORK.

AGENCIES of a financial nature connected with Railroads, Manufacturing and Commercial Business, and Banking operations generally, receive special attention.

**STOCKS, BONDS, NOTES and PILLS OF EXCHANGE
BOUGHT and SOLD on orders.**

THOMAS GEORGE WALKER.

DAVID TWEEDIE.

WALKER & TWEEDIE,

42 PINE STREET,

NEW YORK.

Business Paper and Bills of Exchange negotiated.

BONDS, STOCKS and other Securities bought and sold.

**W. P. STEELE & CO.,
BANKERS,**

23 WILLIAM STREET, NEW YORK.

STOCKS and BONDS Bought and Sold on Commission.

Mercantile Paper and Loans negotiated.

Advances made on all approved Securities.

COLLECTIONS MADE throughout the United States and
Canada.

CINCINNATI STOCK EXCHANGE.

KIRK & CHEEVER,

STOCK BROKERS and RAILROAD AGENTS,

No. 83 WEST THIRD STREET,

CINCINNATI, OHIO.

Railroad Stocks, Bonds, etc., bought and sold, on Commission.
Regular sales at public auction at the Merchants' Exchange.

R. H. RICKARD,

MINING AGENT & STOCK BROKER,

Office No. 21 Nassau st., NEW YORK.

**BUYS and sells MINING SHARES, MINES and
MINERAL LANDS** on commission, will examine
Mines and Mineral Lands in any part of the United States, and
report on their value, etc., etc.

REFERENCES:—P. Chouteau, Jr., & Co., New York and St. Louis, the Hon. Wm. M. Gwin, U. S. Senator, the Hon. C. A. Peabody, N. Y., the Hon. Sam. F. Butterworth, N. Y., F. O. & Forrest, Com. Mer's N.Y., John F. Butterworth, Esq., N.Y., G. O. Williams & Co., Detroit, Mich., Capt. D. Taylor, Norwich, Conn., Kittenhouse, Fant & Co., Bankers, Washington, D. C.
Particular attention given to Lake Superior business.

EUGENE THOMSON,

STOCK AUCTIONEER and BROKER.

No. 37 William st., NEW YORK.

**AUCTION SALES of STOCKS and BONDS every
TUESDAY, at 12 o'clock, at the Merchants' Exchange,
RAILROAD BANK, INSURANCE and other SECURITIES** bought and sold at the Bankers' Board, at Private Sale, or at Auction. All dividends payable in New York collected, and prompt remittances made.

NONE BUT bona fide QUOTATIONS FURNISHED THE PRESS.
The MARKET VALUE of SECURITIES WILL NOT BE SUPRESSED OR ALTERED, and DECEPTIVE OR IRRESPONSIBLE CATALOGUES WILL NEVER BE ISSUED.

A statement showing the capital, dividend months, and last semi-annual dividend of the Banks and Insurance Companies of the city of New York, will be forwarded by mail upon application.

REFERENCES:—Messrs. Wm. and Jno. O'Brien, Thos. Deany & Co., Horace Greeley & Co., Osgin & Co., Tenth & Co., J. & C. Herrian, Geo. F. Newbitt & Co., Eugene P. Pinkett, Esq., (President Excelsior Ins. Co.), John G. Storm, Esq., (President Lenox Ins. Co.), L. G. Irving, Esq., (Secretary Niagara Ins. Co.), Marcus Spring, Esq., Oliver H. Lee, Esq., John H. Griscom, M.D., Rev. Edwin P. Hatfield, D.D., Rev. Theo. L. Cuyler, John Cameron, Esq., Bond, F. Manierre, Esq., New York; Otis Allen, Esq., Albany, N.Y.; Messrs. Gorham & Co., Providence, R. I.

A. H. DYETT,
STOCK AND BOND BROKER,
No. 43 EXCHANGE PLACE,
NEW YORK.

MORSE & CO.,
BANKERS and DEALERS in Stocks, Bonds, Exchange
and Commercial Paper, on commission, No. 49 Wall
street, and 41 William street, NEW YORK.
Orders for the purchase and sale of Stocks and Bonds, at the
Brokers' Board, by letter or otherwise, promptly executed.
Cash advanced on sound saleable securities.

REFER TO
G. VAN BAUR & CO., N. Y. CONTINENTAL BK. N. Y.

SIMEON DRAPER, Auctioneer.

By **SIMEON DRAPER,**
OFFICE, No. 36 PINE ST., NEW YORK.
REGULAR AUCTION SALES
At 36 PINE ST. EVERY DAY.
STOCKS and BONDS bought and sold at private sale.
Sale every day at 1 o'clock. See Catalogue.

DINGEE & HOLDEN,
AUCTIONEERS AND REAL ESTATE BROKERS,
No. 9 NASSAU STREET,
Under Messrs. DUNCAN, SHERMAN & Co.
NEW YORK.
SOLOMON DINGEE,
CHARLES E. HOLDEN,
Stocks, Bonds, Mortgages, & Commercial Paper Bought & Sold.

REFERENCES.
Citizens' Bank, N. Y. Hon. E. D. Campbell, Lt. Gov.,
Messrs. Thompson Bros., Wm.
Bankers, Hon. Judge L. rd, La Crosse,
Messrs. Sewell, Ferris & Co., Jno. M. Levy, Banker,
Geo. P. Rogers, Esq., Hon. Franklin Stead, Minn-
A. Gridley, President McLean, A. & W. A. Saunders, Bankers,
Co. Bank, Illinois, Mt. Pleasant, Iowa.

PETERS, CAMPBELL & CO.,
BANKERS AND DEALERS IN
DOMESTIC EXCHANGE AND BANK NOTES,
No. 50 WALL STREET,
NEW YORK.

SPECIAL ATTENTION GIVEN TO
COLLECTIONS
IN ALL PARTS OF THE UNITED STATES.

PETERS, SPENCE & CO., Lynchburg, Va.
D. T. C. PETERS, } DAVID E. SPENCOR,
N. H. CAMPBELL, } DEXTER OTEY.

REFER TO
JAS. T. BOUTER, Esq., Pres't Bk Republic, } New York City
American Exchange Bank,
Banks and Bankers, Richmond and Lynchburg, Va.

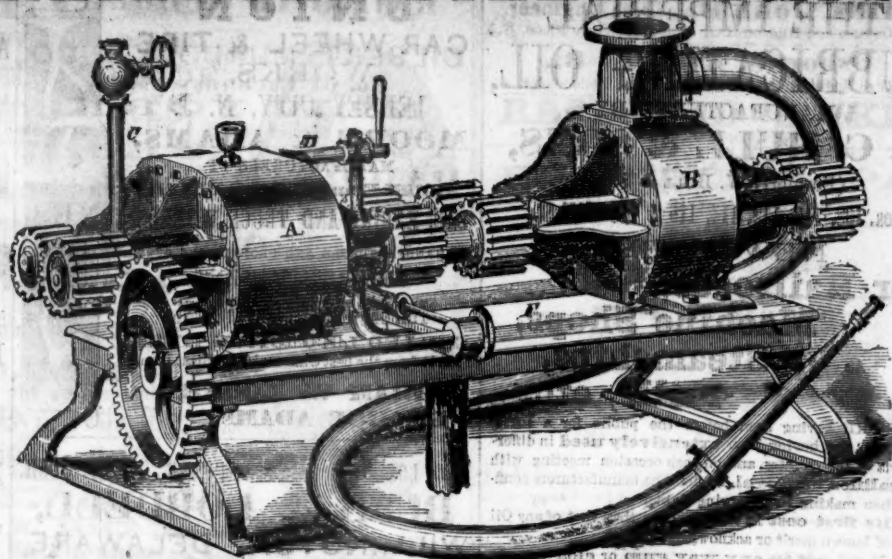
DUNCAN, SHERMAN & CO.,
BANKERS,
Corner PINE and NASSAU STs.,
NEW YORK.

CIRCULAR NOTES and LETTERS OF CREDIT,
FOR TRAVELERS,
AVAILABLE IN ALL THE PRINCIPAL CITIES OF THE WORLD.
ALSO, **MERCANTILE CREDITS,**
For use in EUROPE, CHINA, etc.

H MEIGS, Jr. & SMITH,
BANKERS and BROKERS,
39 WILLIAM STREET,
(FIRST BUILDING BELOW WALL STREET.)
STOCKS and BONDS Bought and Sold on Commission.
MERCANTILE PAPER and LOANS Negotiated.
INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, Jr. WM. ALEX. SMITH.
New York, May 11, 1855.

CHAS. A. FISHER,
Late of the firm of FISHER, DENNY & CO.,
No. 16 Exchange Place.
STOCKS and Bonds bought and sold on commission. Loans
negotiated.

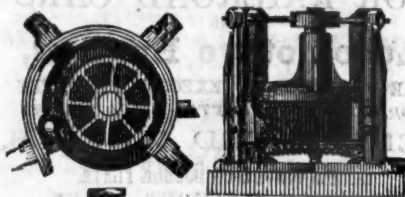
RAILROAD STEAM PUMPS.



HOLLY'S PATENT ROTARY PUMP and ENGINE, the most simple, durable and reliable
PUMPING APPARATUS, yet introduced. Adapted for Steam Fire Engines, Railroad Stations and Factories, and arranged
to be driven by Steam, by Power or by Hand.

C. W. COPELAND, 122 Broadway, New York.

HENRY BURDEN'S PATENT REVOLVING SHINGLING MACHINE.



THE subscriber having recently purchased the Right of this
Machine for the United States, now offers to make transfers
of the Right to any individual, or to any company, who may be
desirous to purchase the Right for one or more of the States.
This Machine is now in successful operation in ten or twelve
Iron Works in and about the vicinity of Pittsburgh, also at
Phoenixville, and Reading, Pa., Covington Iron Works, Md.,
Troy Rolling Mills, and Troy Iron and Nail Factory, Troy,
N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are num-
erous: Considerable saving in first cost; saving in power; the entire
saving in shingling, or hammerman's wages, as no attendance
whatever is necessary.

It being entirely self-acting: saving in time from the quan-
tity of work done, as one machine is capable of working the
iron from sixty puddling furnaces; saving of waste, as nothing
but the scoria is thrown off, and that most effectually; saving
of staffs, as none are used or required.

The time required to furnish a bloom being only about six
seconds, the scoria has no time to set, consequently is got rid
of much easier than when allowed to congeal, as under the
hammer.

The iron being discharged from the machine so hot, rolls
better and is much easier on the rollers and machinery.

The bars roll smoother, and are much better finished.

The subscriber feels confident that persons who will examine
for themselves the machinery in operation, will find it possesses
more advantages than have been enumerated.

For further particulars address the subscriber at Troy, N. Y.

P. A. BURDEN.

VULCANIZED RUBBER GOODS,
MACHINE BELTING,
STEAM & PISTON PACKING,
HOSE OF ALL DESCRIPTIONS,
SHOE SOLEING,
LACE LEATHER,
VALVES,
FIRE BUCKETS, ETC.

THE undersigned Wholesale Agents of the BOSTON
BELTING COMPANY, beg to call the attention of
DEALERS and JOBBERS to the above mentioned goods,
which are executed by all practical mechanics to be

THE BEST PRODUCED.

For list of prices, and a full description of goods, terms, etc.,
apply to

BRANTHILL & CAMPBELL,
190 William St., near Spruce, NEW YORK.

**PARK'S IMPROVED
TRACING LINEN,**
DRAWING MATERIALS,
FOREIGN AND DOMESTIC STATIONERY,
PRINTING & LITHOGRAPHING.

DEVLIN & HAGAN,

No. 7 Nassau st., N. Y.

DR. A. MERRIMAN,
DENTIST,
1 Waverley Place, opposite New York Hotel,
NEW YORK.

PROFESSIONAL CARDS.

Sylvester W. Barnes,
Chief Engineer Watertown and Madison R.R., Madison, Wis.

Alfred W. Craven,
Chief Engineer Croton Aqueduct, New York.

Charles W. Copeland,
Steam Marine and Railway Engineer,
122 Broadway, New York.

Davidson, M. O.,
Chief Engineer Havana Railroad Company.
HAVANA, CUBA.

C. Floyd-Jones,
Engineer Alton and St. Louis Railroad,
Residence, Vandalia, Ill.

Gay, Edward F.,
Civil Engineer, Philadelphia, Pa.

Robert B. Gorsuch,
City of Mexico,
MEXICO.

James H. Grant,
Civil Engineer, Christiana, Rutherford Co., Tenn.

Theodore D. Judah,
Chief Engineer, and Commissioner of
San Francisco and Sacramento Railroad, and of
San Francisco and Sacramento Northern Extension Railroad,
SAN FRANCISCO, CAL.

S. W. Hill,
Mining Eng'r and Surveyor, Eagle River, Lake Superior.

Ellwood Morris,
Civil Engineer, Franklin Institute, Philadelphia.

Mills, John B., Civil Engineer,
Lake Ontario and Hudson R. R. R., 20 Exchange Place, N. Y.

Osborne, Richard B.,
Civil Engineer, Office 73 South 4th st., Philadelphia.

W. Milnor Roberts,
Civil Engineer, Carlisle, Pa.

J. S. Sewall,
CIVIL ENGINEER,
ST. PAUL MINNESOTA.

Silas Seymour,
Consulting Engineer and General Agent,
271 Broadway, N. Y.

Shanly, Walter,
Grand Trunk Railway, Toronto, Canada.

Charles L. Schlatter,
Chief Engineer Brunswick and Florida Railroad,
Brunswick, Georgia.

Charles B. Stuart,
Consulting Engineer, 19 Nassau str., New York.

Trautwine, John C.,
Civil Engineer and Architect, Philadelphia.

A. B. Warford,
Chief Engineer, Susquehanna Railroad, Harrisburg, Pa.

INSTRUMENTS.

Hugo Harttman,
MANUFACTURER of Engineers' and Surveyors' Instruments, 223 Dock st., PHILADELPHIA.

 **E. BROWN & SON,**
MANUFACTURERS OF
**TRANSITS, LEVELS,
RODS, CHAINS, ETC.**
No. 27 FULTON SLIP, N. Y.

 **ENGINEERS' AND SURVEYORS'
INSTRUMENTS, MADE BY
Edmund Draper,**
Surviving partner of
STANCLIFFE & DRAPER,

No. 22 Pear Street, below Walnut,
near Third St., PHILADELPHIA.

J. T. Hobby, (formerly SAWYER & HOBBY,)
MATHEMATICAL Instrument Maker, at the old stand,
156 Water st., New York. 1733

James Prentice,
66 NASSAU St., N. Y., Manufacturer of Mathematical Instruments of every description. Orders promptly filled.

W. & L. E. Gurley, Troy, N. Y.,
MANUFACTURERS of Engineers' and Surveyors' Instruments. Descriptive and priced catalogue gratis.

Knox & Shain,
MANUFACTURERS of Engineering & Telegraphic Instruments, 46 1/2 Walnut st., Phila. (Two premiums awarded.)

F. W. & R. King,
MANUFACTURERS of Engineers', Surveying and Drawing Instruments, No. 226 Baltimore st., BALTIMORE, Md.

Richard Patten,
MANUFACTURER of Mathematical Instruments to the U. S. Government, No. 58 Baltimore st., BALTIMORE, Md.

James W. Queen & Co., Philad.,
MANUFACTURERS of Engineers' Levels, Transits, Chains, Tapes, &c. Priced catalogue by mail gratis.

Wm. J. Young
HAS removed his Engineering and Surveying Instrument Manufactory to No. 43 North Seventh Street, Philadelphia.

H. SAWYER
(of the late firm of SAWYER & HOBBY),
MANUFACTURER of Transits and Levels, has removed to Union Place, near Washington Av. Yorkers, N. Y.

RAILROAD SUPPLIES.

GILBERT, MURDOCK & CO.,
No. 64 Exchange Place,
NEW YORK,

ARE agents for, and prepared to furnish at manufacturers' prices,

**RAILROAD IRON,
LOCOMOTIVE ENGINES,
RAILROAD CARS,
CAR WHEELS,
AXLES, CHAIRS,
SPIKES, TOOLS,
ETC., ETC.**

All inquiries in reference to the above articles will receive immediate attention.
New York, January, 1859.

GEO. M. FREEMAN,

SUCCESSOR TO

PRATT & FREEMAN,

PHILADELPHIA

RAILWAY SUPPLY AGENCY,

No. 123 WALNUT STREET,
PHILADELPHIA.

Railroad Materials, Locomotive and Car Findings,

MACHINERY AND MACHINISTS' TOOLS,

MINERS' TOOLS, ETC.

COTTON WASTE.

WHITE AND YELLOW CAR GREASE,

LOCOMOTIVE BRASS WORK,

Baggage Checks, Barrows, etc., etc.,

RAILROAD LANTERNS, SIGNAL LIGHTS,

STEAM GAUGES, COOKS AND WHISTLES,

INDIA RUBBER HOSE PACKINGS, ETC.

LANTERNS OF ALL DESCRIPTIONS,

ENGINE, STATION, AND SIGNAL BELLS,

Superior Car Upholstery, etc.

AGENCY OF THE KEROSENE OIL COMPANY.

Orders solicited, promptly filled, and forwarded with despatch and care at the manufacturers' lowest prices.

S. B. BOWLES,
MANUFACTURER AND DEALER IN

**RAILROAD
SUPPLIES,**

No. 12 GOLD STREET,
(Between PLATT and MAIDEN LANE.)

NEW YORK.

HOLT, GILSON & CO.,

MANUFACTURERS AND DEALERS

IN

RAILROAD & STEAMBOAT

SUPPLIES,
5 WATER ST., BOSTON.
LOCOMOTIVES AND CARS.

Rails, Sleepers, Chairs, Spikes, Wheels, Axles and Tires.

BOILER TUBES AND FELTING.

BOLTS, NUTS & WASHERS.

CAR, SHIP AND BRIDGE BOLTS.

Locomotive, Hand and Ship Lanterns; Car Trimmings of all descriptions; Steam and Water Gauges; Signal Bells, etc., etc.

AGENTS FOR CAR HEAD LININGS.

Sole Agents for TOMES' celebrated GAUGE GLASSES, and PACKER'S IMPROVED RATCHET DRILL.

Orders filled with despatch and at the lowest prices.

RAILROAD SUPPLIES.

WILLIAMS & PAGE,
No. 44 Water, between Congress and Kilby Streets,

Boston, Mass.

**Iron Rails, Chairs, & Spikes,
FREIGHT AND COAL CARS,**

(on hand or made at short notice.)

Wheels and Axles of all kinds,

LOWMOOR, AMES, BOWLING AND NASHUA TIRES,

IRON AND STEEL,

Of all kinds for Shops and Tracks.

Car Trimmings, Paints, Oil, Varnish, Car and Switch Locks, Ventilators, Lanterns, Head-Lights, Gauges, Rubber Springs, Chairs, Hose and Belting, Ash, Pine and other Timber, and ALL MATERIALS USED in Equipment and Repairs of Railroads, Engines and Cars, at lowest prices.

THOS. S. WILLIAMS, PHILIP S. PAGE,

Late Sup't Boston & Maine R. R. Late PASH, ALDEN & Co.

REFERENCES.

JAMES HAYWARD, President PERLPS, DODGE & Co., N. Y.
Boston and Maine R. R. COOPER, HEWITT & Co., do.
Capt. WM. H. SWIFT, Boston. BEEVER, BOCK & Co., Phila.
WM. E. COFFIN & Co., do. E. S. CHESBROUGH, Chicago.
S. M. FULTON, Pres't Phila. W. & R. R. R.

MORRIS K. JESUP. JOHN KENNEDY. GILEAD A. SMITH.

M. K. JESUP & COMP'Y,
RAILWAY AGENTS & BANKERS,

44 EXCHANGE PLACE,
NEW YORK,

AGENTS FOR THE SALE OF

Foreign and American Railroad-Iron,

AND ALL MATERIALS NECESSARY FOR THE
Construction, Equipment & Operating of Railways.

RAILWAY AND OTHER SECURITIES

BOUGHT AND SOLD

Either privately or at the Board of Brokers.

A. S. & A. G. WHITON

32 PINE ST., NEW YORK,

DEALERS IN

RAILROAD IRON,

CHAIRS AND SPIKES,

LOCOMOTIVES,

PASSENGER AND FREIGHT CARS.

MANUFACTURERS' AGENTS

FOR Sellers' Iron Turn Tables, Disperser's Patent Blower,

Gardiner's Volante Car Springs and

RAILWAY SUPPLIES GENERALLY.

ALSO

NEGOTIATORS OF SECURITIES.

A. BRIDGES & CO.,

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS,

OF EVERY DESCRIPTION,

64 COURTLANDT ST., NEW YORK.

RAILROAD AXLES, WHEELS AND CHAIRS,

SPIKES, BOLTS,

NUTS, WASHERS,

CAR, SHIP AND BRIDGE BOLTS.

IRON FORGINGS OF VARIOUS KINDS, ETC., ETC.

STEEL AND RUBBER SPRINGS,

LOCOMOTIVE AND HAND LANTERNS,

PORTABLE FORGES AND JACK SCREWS,

COTTON DUCK FOR CAR COVERS,

BRASS AND SILVER TRIMMING.

Also, Sole Agents for the Manufacturers of Car Head Linings.

Orders for the purchase of goods on commission, aside from our regular business, respectfully solicited.

ALBERT BRIDGES. JOEL C. LANE.

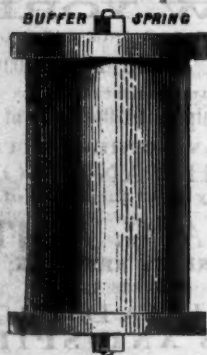
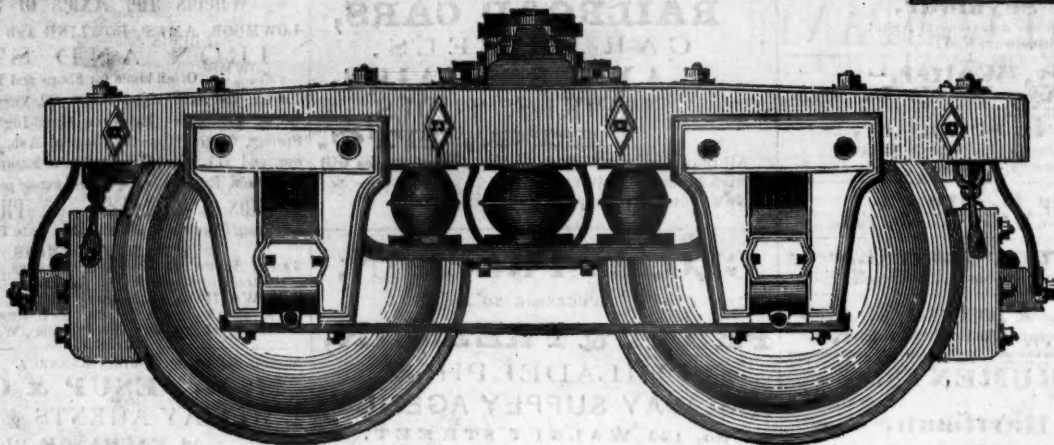
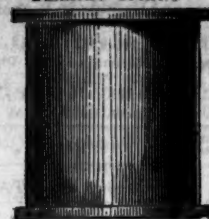


New England Car Spring Co.

SOLE MANUFACTURERS

OF THE

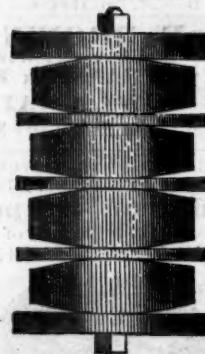
BEARING SPRING



India Rubber Car Springs.

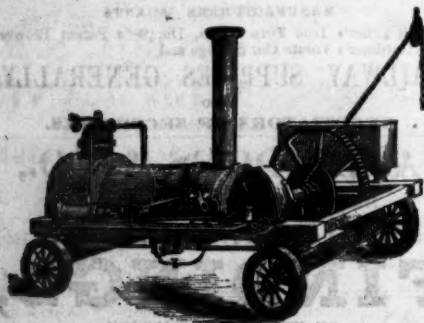
OFFICE, 61 CHAMBERS STREET,
NEW YORK.

IMPROVED BUFFER



FIRST INTRODUCED JULY, 1849.

Harlan & Hollingsworth,
WILMINGTON, DELAWARE,

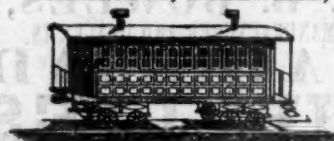


A. L. ARCHAMBAULT,
MANUFACTURER OF
**PORTABLE STEAM HOISTING,
AND PUMPING ENGINES,**
From 3 to 30 horse-power, and
STATIONARY ENGINES, from 3 to 100 horse-power.
S. E. cor. Fifteenth and Hamilton Sts.,
PHILADELPHIA.

**ST. LOUIS
CAR WORKS.**



S. B. LOWE & CO.,
PALM AND SECOND STREETS,
ST. LOUIS, MO.



MANUFACTURERS OF ALL KINDS OF
RAILROAD MACHINERY.

PASSENGER CARS of the finest finish, also all kinds of
FREIGHT CARS, DUMPING CARS, HAND CARS,
WHEELS and AXLES, STEEL SPRINGS, and in fact
everything for the full equipment of a road.
From our long experience in Car building, and our
facilities for doing work, we are enabled to give en-
tire satisfaction in every particular.

From our location, and convenience for ship-
ment, we can supply southern roads with despatch, and
ship at reasonable freights.

We are also extensively engaged in building Iron Ves-
sels and Iron Steam Boats, Steam Engines and
Boilers, and Machine Work in general. All orders
executed with despatch and on reasonable terms.

THE HARRISBURG CAR COMPANY,
HARRISBURG, PENNA.,

ARE prepared to fill the heaviest orders for Passen-
ger, Mail, Baggage, Box, Cattle, Platform,
and Coal Cars.

Located in the centre of the Iron, Coal, and Lumber
region of Pennsylvania, having the most improved labor saving
machinery, with a large stock of well seasoned lumber
on hand, and an Eastern Superintendent thoroughly expe-
rienced in every department of the passenger and freight car
building business, this company can recommend their manu-
factures as equal to the best Eastern work. This company also
cast CHILLED PLATE CAR WHEELS from the
best cold blast charcoal iron in the State that are en-
tirely free from strain, hat are unsurpassed for strength
and durability and which they will furnish fitted or unfitted at
the lowest prices.

N. B.—Strong and neat hand cars constantly on hand.

WM. T. HILDRUP, **ISAAC MCKINLEY,**
Superintendent. Treasurer.

UNION RAILROAD CAR WORKS,
PORTSMOUTH, VA.

FREIGHT, PASSENGER, BAGGAGE, EXPRESS, MAR-
KET, COAL, LUMBER and HAND CARS, manufactured
at this establishment of the best material, and in the most
approved manner, with either Plate or Spoke Wheels
and Axles, of Salisbury or other Iron. Trucks fitted up, or
Wheels and Axles separately will be furnished at the shortest
notice, and shipped to any part of the United States.

Having extensive arrangements and superior
facilities for manufacturing at this establishment, orders
will be received and contracts made for equipping entire
roads at short notice.

G. W. GRICE, Agent.

VENTILATION.

THE undersigned has devised and patented the only system
of VENTILATION for Buildings, Vessels, RAIL-
ROAD CARS, etc., by which spontaneous ventila-
tion can be effectually carried out, and is willing to dispose of
the same to parties desirous of purchasing at a reasonable price.

Address **HENRY RUTTAN,**
Coburg, Canada.

**WEISSENBORN'S PATENT
Incrustation Preventer
FOR STEAM BOILERS,**

EFFECTUALLY obviates the Formation of Scale
on the Plates by separating the incrusting matter
from the water before it enters the boiler, at the same time
condensing a large portion of the steam and supplying the
purified water to the boiler at about boiling heat. The appara-
tus is compact, simple, and applicable to all kinds of Engines.
Recent modifications render it still more efficient than heretofore.

Testimony as to its successful operation in preventing scale,
and also as a HEATER AND CONDENSER, can
be furnished by the subscriber.

Probably no modern improvement connected with Steam
Power combines so many advantages as this. The economy
of Fuel alone from its use soon repays the
cost of the apparatus. Prices reduced. Terms easy.

STEWART KERR, Engineer,
Agent, 15 Broadway, NEW YORK.